INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT SITE INSPECTION REPORT FOR LANE STREET GROUND WATER CONTAMINATION ELKHART, INDIANA ELKHART COUNTY U.S. EPA ID#: INN000510229 (Volume 1 of 3)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

SITE INSPECTION REPORT

FOR

LANE STREET GROUND WATER CONTAMINATION

ELKHART, INDIANA

ELKHART COUNTY

SEPTEMBER 5, 2008

EPA ID: INN000510229

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001

Signature Page
For
Lane Street Ground Water Contamination
Elkhart, Indiana

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SECTION I

INTRODUCTION

The Indiana Department of Environmental Management (IDEM) Site Investigation Section, under a Cooperative Agreement (CA) with the United States Environmental Protection Agency (U.S. EPA), Region V, has been funded to perform Site Inspections (SIs) at certain sites listed in the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS). This work is conducted under the authority of the Federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (aka Superfund), and the Superfund Amendments and Reauthorization Act (SARA) of 1986. Sites eligible for an SI include those sites for which the Preliminary Assessment (PA) did not conclude that "No Further Remedial Action is Planned" (NFRAP), as reflected in CERCLIS.

The primary objectives of the SI are:

- To collect additional data beyond the PA, using the Hazard Ranking System (HRS), to make the determination of whether the site should be placed on the National Priorities List (NPL);

- To identify sites that may require removal actions to address immediate threats to human health and/or the environment.

The Site Investigation Section was given approval by the

U.S. EPA to conduct an SI at Lane Street Ground Water Contamination located in Elkhart, Elkhart County, Indiana. On August 22, 2007, IDEM Site Investigation Section staff received a call from the Elkhart County Health Department (ECHD). The ECHD stated that an analysis of a drinking water sample obtained from a private well on Lane Street in Elkhart, Indiana was found to contain highly elevated levels of Trichloroethylene (TCE) (1560 µg/l) [Maximum Contaminant Level (MCL) is 5 ug/l] and other break down products.

Information contained within this report will be used to evaluate this site under the Revised Hazard Ranking System Model for possible inclusion on the NPL of hazardous waste sites.

Section II

Site Background

2.1 Introduction

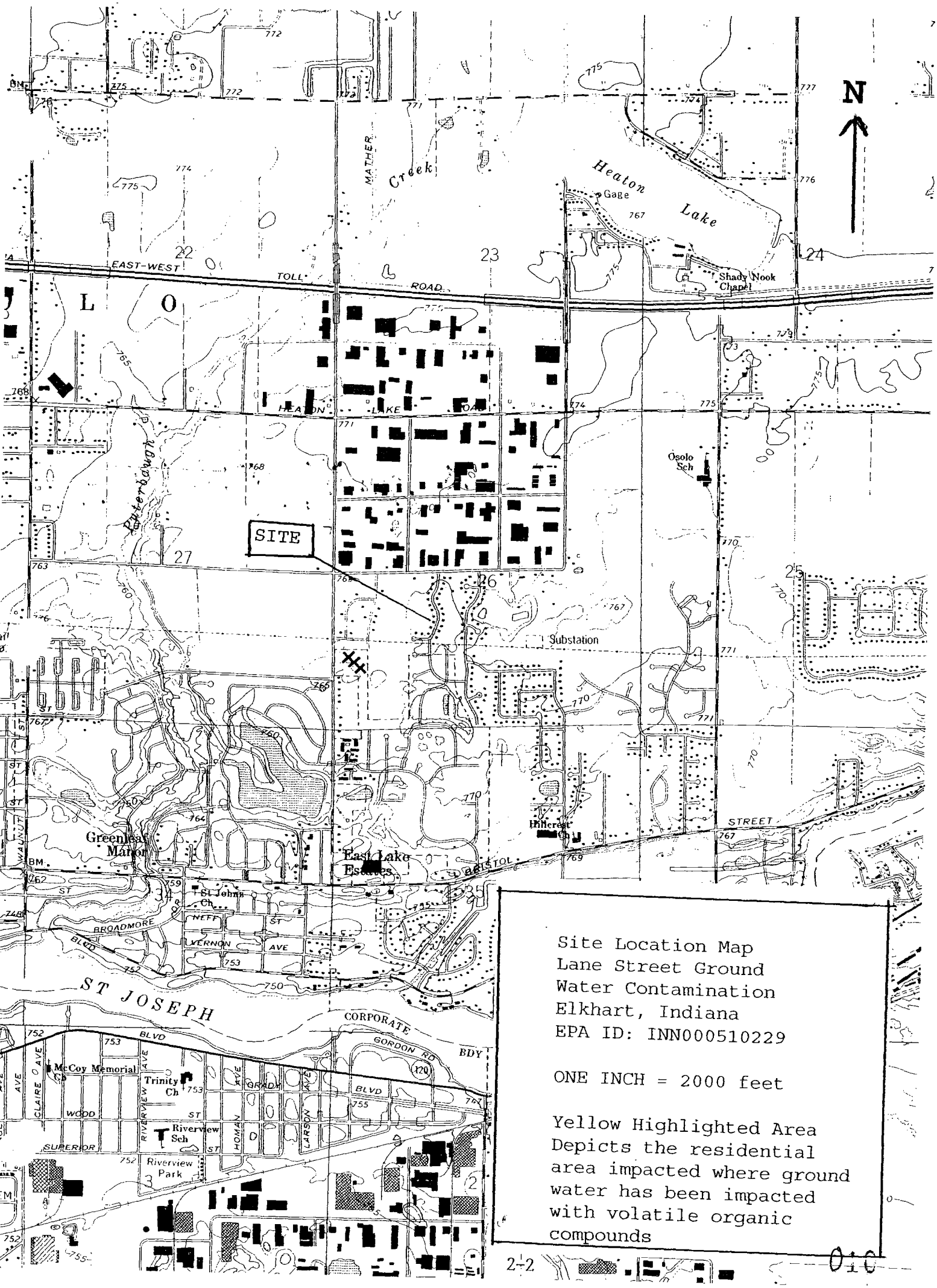
This section includes information obtained from the site representative interviews and IDEM files.

2.2 SITE LOCATION and DESCRIPTION

The site can be found in Section 26, Township 38 North, Range 9 East (Figure 1, Page 2-2). The site's geographic coordinates are 41° 43′ 0.655″ North Latitude and 86° 85′ 15.625″ West Longitude.

The site is comprised of a residential subdivision, several industrial buildings, an office building, a parking lot, and an open field vegetated with grasses. Lane Street is bounded to the north by County Road 106, to the east by Kershner Street, to the south by another residential subdivision and to the west by farm land.

The site is located in a predominantly residential area providing many potential targets. An industrial park located north of County Road 106 is comprised of numerous plant buildings and offices. Refer to the Site Location Map on page 2-2.



Site Location Map
Lane Street Ground
Water Contamination
Elkhart, Indiana
EPA ID: INN000510229

ONE INCH = 2000 feet

Yellow Highlighted Area
Depicts the residential
area impacted where ground
water has been impacted
with volatile organic
compounds

2.3 Site History and Waste Characteristics

In October 2006, a Phase I Environmental Site Assessment (ESA) was conducted for the Geocel facility located at 53280 Marina Road in Elkhart, Indiana. The ESA concluded that a subsurface investigation should be completed in the vicinity of a former Tetrachloroethene (PCE) underground storage tank (UST). The UST was removed in 1986. Subsequent investigations in this area by a private consulting firm indicated that a release of chlorinated solvents had occurred to the ground water pathway. The chlorinated solvents were found to have migrated off-site to the south toward Kershner Street, a residential area. All residents in this area obtain drinking water from individual private wells. The water in many of the residential wells was found to contain elevated levels of volatile organic compounds (VOCs). Geocel supplied carbon filters to the residents.

Geocel alerted IDEM and the Elkhart County Health Department about the ground water contamination and applied to IDEM's Voluntary Remediation Program (VRP). Geocel was accepted into the program on July 12, 2007.

Geocel's investigation concluded that the ground water contamination was confined to an area bordered by Kershner Street to the west, the Geocel facility to the north, County Road 113 to the east, and Crestwood Street to the south. Geocel

is currently addressing the ground water contamination concerns from their facility through the VRP. Refer to Appendices P and Q which show the north and south halves of their ground water plume. These maps were submitted by Geocel as preliminary draft information in order to aid in development in the remediation work plan (RWP) that is required by IDEM's VRP. The information in these maps may change when the RWP is finalized. The RWP, due to IDEM by August 29, 2008, is required to be all-inclusive, and should contain all information supporting the nature and extent of contamination, as well as the details of the proposed remedial strategy.

On August 22, 2007, IDEM Site Investigation Section staff received a call from the Elkhart County Health Department (ECHD). The ECHD stated that a resident located at 43514 Lane Street had submitted a sample of her drinking water to the Water Quality Laboratory at Heidelberg College in Tiffin, Ohio. The analysis of the water revealed highly elevated levels of TCE (1560 μg/l) and other break down products.

Geocel is not claiming responsibility for the contamination on Lane street because: 1) the Lane Street ground water contamination lies outside of the area considered to be impacted by Geocel and 2) the ground water plume appears to be another plume consisting of other contaminants not detected on Kershner Street, a street parallel to the east of Lane Street.

On August 23, 2007, IDEM staff conducted a visual site reconnaissance of the surrounding properties. The majority of residents on and around Lane Street utilize private wells for drinking water. Numerous businesses and small industries lie in an industrial park located north of County Road 106.

Also on August 23rd, Site Investigation staff sampled the ground water from seven private wells on and north of Lane Street including the residence that had phoned the ECHD with the elevated TCE concentration. Analysis of the ground water samples revealed that the drinking water in four residential wells were found to contain elevated levels of VOCs at concentrations above MCLs.

On August 30, 2007, IDEM conducted another sampling event on Lane Street as part of a PA. Please refer to the PA dated October 7, 2007. Analysis of the water samples collected for this sampling event revealed that the drinking water from a total of 11 homes on Lane Street was found to contain elevated levels of TCE above MCLs. In September 2007, IDEM supplied bottled water to those residents whose water was found to contain elevated levels of TCE. The U.S. EPA, in a cooperative effort with IDEM's investigation, then provided carbon filtration systems to those homes in October 2007.

Section III

Field Observations and Sampling Procedures

3.1 Introduction

This section outlines the procedures and observations of the Lane Street Ground Water Contamination Site Inspection.

3.2 Site Reconnaissance, Observations, and Sampling

On April 14, 2008 Mark Jaworski, (Project Manager) met with IDEM team members Ken McDaniel, Kevin Spindler, Leda Casey, Chris Bonniwell, Robyn Raftis, Chris Ferguson, Tim Johnson, Joy Krutek, Aunna Huber, Bill Giles, Steve McIntire, Kevin Herron, Tom Doreff, Doug Fisher, Dan Chesterson, Namrata Patel, Sandra Roberts, and Larry Mansue. The following EPA staff members were also met on site: Steve Peterson, Jim Ursic, Tom Sedlak, and James Burden.

Inspection of the site revealed the following observations:

A. The impacted wells that were sampled by IDEM on August 23, 2007, lie predominantly in a residential area on Lane Street.

B. About 25 residents on Lane Street utilize private wells for obtaining drinking water.

C. There are numerous different industrial/commercial facilities located northwest, north, and northeast of Lane

Street that could potentially be sources of the ground water contamination.

D. Some stressed vegetation was observed between buildings on the Voyager property.

E. There were no storm drains in the industrial park north of Lane Street.

F. Irrigation systems were common in the industrial area from the ground water in the area as well as from the city's municipal water system.

3.2.1 Potential Sources

A reconnaissance visit at numerous businesses was conducted on April 14, 2008. Below is a list of those businesses along with a brief narrative as to what these facilities manufacture and what products they use in their processes. It should be noted that these businesses had been annexed into the city limits several months prior to this visit. Listed below are the original (if known) and new addresses associated with each facility.

Rverside Tool Corporation
(23575 County Road 106) 3504 Henke
Elkhart, Indiana

Riverside Tool Corporation manufactures and sharpens tools. Riverside can sharpen a full array of woodworking tools. The following is a list of some of the tools this facility can service: drill bits, hole saws, most hand tools, router bits, carbide tipped inserts, insert heads, corrugated knives, corrugated knife heads, machine tools, saw blades, groovers, hoggers, dado sets, hammer and tensioning of blades, brazed cutters, and planer knives. The plant manager stated that Ionoplus 3000 (manufactured by Oelheld GmbH), Transogrind Tg 250 manufactured by Transor Filter USA, and Grindklean, are currently used at the facility. MSD sheets that were provided for these fluids indicate no chlorinated compounds are present in these products.

Voyager, Inc.
523468 Drive
Elkhart, Indiana

Voyager Inc. was established in 1975 and is a manufacturer of precision metal products. The facility is located in a 120,000 square foot facility. The facility manufactures metal chair frames, institutional furniture, cafeteria and lunchroom furnishings, general classroom furnishings, creative play and rest time furnishings for daycare and early childhood facilities.

Voyager utilizes its Bystronic lasers to maximize production time. The lasers are able to cut stainless and galvanized steel with extremely high accuracy. The following is a list of equipment that voyager operates: Hurco CNC 65 ton brake press, Donewell DNC 120 ton brake press, mechanical presses (10-180 tons), mechanical coil fed presses (60-150 tons), Grant rivet spinners, cold saws, bridgeport mills, lathes, and drill presses.

Voyager also has twenty five 250 amp Miller welding machines (mild, aluminum, stainless), two spot welders, two plasma cutters, and aluminum tig welders to fulfill production needs. Voyager uses a state-of-the-art automated powder coating system to deliver a durable, high quality finish. Voyager uses Autodesk Inventor 10 with 3D rendering and Autocad 2002. The facility representative stated that for the past 10 to 15 years, the facility has utilized a small self contained cabinet, supplied by Safety Kleen, for cleaning purposes. No chlorinated substances are currently used at this facility. Hydraulic oils are used to replenish presses when needed. It is unknown what was present at this location prior to 1975.

Elkhart Metals Distributing
(23537 County Road 106) 3506 Henke
Elkhart, Indiana

Metals service center that manufactures products for Recreation Vehicles (RVs) and cargo trailers. The facility utilizes gear manufacturing machines, lathes and turning centers, machining centers, horizontal machining centers, multi-tasking or universal machining centers, vertical machining centers, and metal milling machines. The facility representative stated that MILKool 140AAX is used at this facility in order to keep blades cool and lubricated. MSD sheets that were provided for this fluid indicate that no chlorinated compounds are present in this product.

Marine Fasteners Inc.
2501 Marina Drive
Elkhart, Indiana

The facility is a warehouse and distribution center of marine fasteners. No production is currently conducted at this facility. Current business occupied building since 2001. Prior to Marine Fasteners building was occupied by Dietch Carpet wholesaler.

Deitch owned and built the building in the 1980's. The branch manager stated that only basic office cleaning supplies were used at this facility. No solvents or oils were known to have been used.

Phoenix USA, Inc.
(53217 Marina Drive) 2601 Marina Dr.
Elkhart, Indiana

Phoenix USA, Inc. manufactures motor homes, travel trailers & campers; recreational vehicles, all terrain vehicles tracked or wheeled, go carts, caravans or camper trailers, agricultural tractors, motor homes, snowmobiles or snow scooter, golf carts, croquet sets, horseshoe equipment, lawn darts, and other recreational equipment. The president of the facility indicated that only acetone, mineral spirits, and basic office cleaning supplies are currently used at this facility.

Vacant Building
3504 Cooper Drive
Elkhart, Indiana

No inspection was conducted at this facility because the building is vacant.

Transtech Precision Corp.
53212 Ada Drive (2501 Ada Drive)
Elkhart, Indiana

The facility is a distributor of fasteners, adhesive corners, bag clips, book rings, prong fasteners, self adhesive fasteners, binder posts, wall or board clips, rubber bands, clasp fasteners, paper clips, binder or bulldog clips, pins or tacks, staples, velcro fasteners, adhesive mounts, hole reinforcements, round head fasteners, tag fasteners, screw posts, ink and lead refills. The facility currently uses basic cleaning supplies.

Kellmark Corporation
(53465 Ada Drive) 2600 Ada Dr.
Elkhart, Indiana

Kellmark Corporation is a family-owned business that was founded by Jack R. Kelly in 1968. The company manufactures inspirational calendars and greeting cards. The company offers five and six color sheet feed offset printing as well as web printing and a complete bindery to manufacture its products. The JRK Line has expanded to include inspirational advertising calendars for several denominations including Catholic, Protestant, Episcopal, Lutheran, Spanish and Jewish. The company also offers non-denominational and general calendars as well as a complete line of bookmarks. The facility manager stated that ink and office cleaning supplies are currently used at this facility.

X-tremeVinyl Solutions
53386 Ada Drive (2506 Ada Drive)
Elkhart, Indiana

X-treme Vinyl Solutions manufactures plastic fencing accessories fibrocement fencing, metal fencing, wood fencing, roofing accessories, exterior finishing materials, rain gutters and accessories, siding and exterior wall materials. The office manager stated that only acetone is currently used at this facility.

Tumac's Covers
3505 Cooper Drive
Elkhart, Indiana

The company is a manufacturer of custom tarps, boat covers and tops. Tumac's custom boat covers have double stitched fully concealed lap seams that won't leak, double thick drop skirt, heavy duty draw cord, nylon tie down loops that won't scratch boats and reinforcements sewn in at the windshield and other stress points. The facility has over 10,000 boat patterns stretching back 30 years. The site manager was unavailable to discuss the types of cleaning supplies the facility uses.

Thetford Corp., a Division of Norcold
3503 Cooper Drive
Elkhart, Indiana

Thetford Corporation provides products and services to the manufacturers and users of mobile vehicles throughout the world. The Thetford Corporation at this location is a distributor of its products only. A company representative stated that no manufacturing occurs at this facility. Only basic office cleaning supplies are known to be used at this facility.

(23542 Cooper Drive) 3507 Cooper Drive
Elkhart, Indiana

CQC is a manufacturer of custom interiors for towable vehicles. They are on city water but have a well they use for workshop usage. The CQC building was previously owned by Dygert Seating until 2004. The facility currently uses basic cleaning supplies.

Hadley
2503 Marina Drive
Elkhart, Indiana

This business unit designs, develops, tests, markets, and manufactures products for the RV and motor coach markets. The facility specializes in the manufacturing of air horns, electric horns, height control valves, mini air compressors, mirrors, smart air management system, tour coaches, and transit interior systems.

Prior to Hadley, the plant building located at this address was occupied by Dygert Seating, a division of Flexsteel Inc. Dygert Seating's line of business was manufacturing upholstered vehicle seating and stadium seating.

Ashland Distribution Chemical of Indiana
Cooper Drive
Elkhart, Indiana

This facility is a distribution warehouse of polyester resins which has operated from 1991 to the present. The facility bulks off the resins from tank trucks and transfers them into drums. No manufacturing occurs at this facility. The plant manager stated that only basic cleaning supplies are used. The facility utilizes an onsite, 30 ft. deep well for fire extinguishing purposes.

Prior to Ashland, General Fiberglass operated at this location from 1988 to 1991. General Fiberglass conducted the same type of operations as Ashland Distribution Chemical does now.

Refer to the Business Location Map, Appendix M, for an aerial view of the locations of the above mentioned facilities. Reconnaissance inspections of additional facilities were conducted on September 17 and 18, 2008. An inspection narrative along with an accompanying map is found in Appendix S for the September 17 and 18, 2008 inspections.

3.3. Ground Water Sampling

From April 14 through April 17, 2008, IDEM staff collected a total of 132 ground water samples. The samples are identified as E2PP2 through E2PT8, E2PX3 through E2PY3, E2PY5, E2PY6, E2PZ3 through E2Q01, E2Q05 through E2Q32, E2Q36 through E2Q38, E2Q40 through E2Q42, E2Q46, E2Q60 through E2Q66, E2Q72, E2Q74, E2Q75, E2Q77, E2Q78, E2Q83 through E2Q90, E2Q92 through E2Q93, and E2Q95 through E2Q99. Refer to the Ground Water Sample ID Location Map, Appendix H, for an aerial view of the ground water sample locations. Note that samples E2PP3, E2PP4, E2PQ6, E2PQ7, E2Q36, E2Q38, E2Q77, E2Q78, E2Q97, and E2Q98 are trip blanks and samples E2Q00 and E2Q27 are equipment blanks. Samples E2Q74 through E2Q76 are investigative derived waste water samples. Note that the trip blanks, equipment blanks, and the investigative derived waste water samples are not listed in Appendix H. Sample E2PQ2 is a duplicate of E2PR0, E2PR8 is a duplicate of E2PR7, E2PS7 is a duplicate of E2PS6, E2PT5 is a duplicate of E2PT4, E2PZ5 is a duplicate of E2PZ4, E2Q01 is a duplicate of E2Q95, E2Q26 is a duplicate of E2Q24, E2Q46 is a duplicate of E2Q42, E2Q87 is a duplicate of E2Q86, and E2Q89 is a duplicate of E2Q88. The Ground Water Sample Location and Comment Table, Table 1, Pages 3-8 through 3-14, depicts the location and any comments regarding each water sample. The Address Location Map, Appendix E, depicts an aerial view of the location of the addresses shown in Table 1.

Ground Water Sample Location and Comment Table (Table 1)

CLP ID	Sample ID	Sample Location	Comments
E2PP2	GW-T-23	West of former Dygert building north of ditch sampled at 23 feet	None Reported
E2PP3	GW 12	Trip Blank	Clear, odorless
E2PP4	GW13	Trip Blank	Clear, odorless
E2PP5	GW24	53598 Kershner Street	Slight odor
E2PP6	GW25	53589 Kershner Street	None reported
E2PP7	GW33	23560 CR. 106	None reported
E2PP8	GW-V-30-35	West of former Dygert building near fence, north of ditch, sampled at 35 feet	None reported
E2PP9	GW-T-8	Location T; north of former Dygert Building, near ditch, sampled at 8 feet	Cloudy very turbid
E2PQ0	GW34	23624 CR 106	None reported
E2PQ1	GW-T-18	West of former Dygert Building near fence, north of ditch, sampled at 18 feet	Cloudy, slightly turbid
E2PQ2	GW80	53548 Lane Street	Duplicate of E2PR0
E2PQ3	GW38	CQC3507 Cooper Drive	Well inside by side loading bay
E2PQ4	GW53	Voyager Inc. 53468 Ada Drive	None reported
E2PQ5	GW54	53672 Lane Street	None reported
E2PQ6	GW52	Trip Blank	Clear, odorless
E2PQ7	GW69	Trip Blank	Clear, odorless
E2PQ8	GW64	53564 Lane Street	Sample obtained prior to filtration
E2PQ9	GW78	23557 Timothy Court	None reported
E2PR0	GW79	53548 Lane Street	Sample obtained after 10 inch filter
E2PR1	GW82	23742 CR. 106 E	None reported
E2PR2	GW81	53532 Lane Street	Sample obtained after 10 inch filter
E2PR3	GW3	Marine Fastener 53471 Marina Drive	Clear, odorless
E2PR4	GW4	Transtech 53212 Ada Drive	Clear, odorless
E2PR5	GW10	53465 Ada Drive	None reported
E2PR6	GW11	53386 Ada Drive	Clear, odorless
E2PR7	GW18	53516 Kershner Street	None reported
E2PR8	GW19	Same as E2PR7	Duplicate of E2PR7
E2PR9	GW21	23585 Timothy Court	Clear, odorless
E2PS0	GW20	23578 Timothy Court	Clear, odorless
E2PS1	GW23	23519 Timothy Court	Clear, odorless
E2PS2	GW22	23558 Timothy Court	Clear, odorless
E2PS3	GW1	23471 Barley Court	Resident not home
E2PS4	GW2	23723 Barley Court	None reported

Sample Location And comment Table (Continued)

CLP ID	Sample ID	Sample Location	Comments
E2PS5	GW5	53514 Lane Street	Sample obtained before filtering system
E2PS6	GW6	53515 Lane Street	Sample obtained before filtering system
E2PS7	GW7	Same as E2PS6	Duplicate of E2PS6
E2PS8	GW9	53677 Lane Street	None Reported
E2PS9	GW8	53569 Lane Street	None Reported
E2PT0	GW16	53585 Lane Street	Sample obtained from outside spigot, it does not go through a filter
E2PT1	GW15	53569 Lane Street	Outside faucet is not filtered
E2PT2	GW14	53584 Lane Street	Outside faucet is not filtered
E2PT3	GW57	53604 Lane Street	Sample obtained before filtering system filter beneath stairwell
E2PT4	GW65	53535 Lane Street	Sample obtained before filter
E2PT5	GW66	Same as E2PT4	Duplicate of E2PT4
E2PT6	GW-S-8 (GW94)	Direct push sample obtained northeast of Riverside Tool Near Ditch, sample screened 8 feet	Cloudy, turbid
E2PT7	GW-S-18 (GW95)	Direct push sample obtained northeast of Riverside Tool Near Ditch, sample screened 18 feet	Cloudy, turbid
E2PT8	GW-S-30 (GW96)	Direct push sample obtained northeast of Riverside Tool Near Ditch, sample screened 30 feet	Cloudy
E2PX3	GW-C-30 (GW17)	Direct push sample obtained at 30 feet at location C; SE corner of Voyager, north of CR 106	Silty
E2PX4	GW-C-18 (GW28)	Direct push sample obtained at 18 feet at location C; SE corner of Voyager, north of CR 106	Silty, very low flow
E2PX5	GW-S-8 (GW27)	Direct push sample obtained at 8 feet at location C; SE corner of Voyager, north of CR 106	Some silt
E2PX6	GW-E-30 (GW39)	Direct push sample obtained at 30 feet at E; SE Riverside Tool parking lot in grass	Silty, odorless

Sample Location and Comment Table (Continued)

CLP ID	Sample ID	Sample Location	Comments
E2PX7	GW-E-18 (GW40)	Direct push sample obtained at 18 feet at E; SE Riverside Tool parking lot in grass	Silty, odorless
E2PX8	GW-E-8 (GW27)	Direct push sample obtained at 8 feet at E; SE Riverside Tool parking lot in grass	Silty, odorless
E2PX9	GW 47	Riverside Tool Corporation	Sample collected from well that services sprinkler system
E2PY0	GW-L-30 (GW63)	Direct push sample obtained at 30 feet at location L; Between Riverside Tool and Voyager Buildings	Silty, odorless
E2PY1	GW-L-18 (GW68)	Direct push sample obtained at 18 feet at location L; Between Riverside Tool and Voyager Buildings	Silty, very low flow
E2PY2	GW-L-8 (GW67)	Direct push sample obtained at 8 feet at location L; Between Riverside Tool and Voyager Buildings	Silty, odorless
E2PY3	GW-G-18 (GW83)	Direct push sample obtained at 18 feet at location G; SE Elkhart Metal Distributing near CR 106	Cloudy
E2PY5	GW-P-18 (GW91)	Direct push sample obtained At NE corner of Elkhart Metal Distributing near ditch; sample obtained from 18 feet	Cloudy
E2PY6	GW-P-30 (GW92)	Direct push sample obtained At NE corner of Elkhart Metal Distributing near ditch; sample obtained from 30 feet	Cloudy
E2PZ3	GW-M-30 (GW73)	Direct push sample obtained At location M; East of Riverside Tool parking lot, adjacent to Elkhart Metal garage door, sample obtained from 30 feet	Clear, odorless
E2PZ4	GW-M-18 (GW74)	Direct push sample obtained At location M; East of Riverside Tool parking lot, adjacent to Elkhart Metal garage door, sample obtained from 18 feet	Silty, odorless
E2PZ5	GW-M-18 (GW75)	Same as E2PZ4	Duplicate of E2PZ4
E2PZ6	GW-M-8 (GW89)	Direct push sample obtained at location M; east of Riverside Tool parking lot, adjacent to Elkhart Metal garage door, sample obtained from 8 feet	Silty, odorless
E2PZ7	GW-R-30 (GW88)	Direct push sample obtained at location R; 30 feet depth	Clear, odorless

Sample Location and Comment Table (Continued)

CLP ID	Sample ID	Sample Location	Comments
E2PZ8	GW-R-18 (GW85)	Direct push sample obtained at location R; east side of Riverside Tool property, near Hadley fence, sample obtained from 18 feet	Silty, odorless
E2PZ9	GW-R-8 (GW86)	Direct push sample obtained at location R; east side of Riverside Tool property, near Hadley fence, sample obtained from 8 feet	Silty, odorless
E2Q00	GW87	Equipment Blank	Odorless
E2Q01	GW-V-13 (GW104)	Same as E2Q95	Duplicate of E2Q95
E2Q05	GW-0-18 (GW29)	Direct push sample obtained from north part of Riverside Tool property near ditch, to ditch location 0; sample obtained from 18 feet	Cloudy
E2Q06	GW-0-30 (GW30)	Direct push sample obtained from north part of Riverside Tool property near ditch, to ditch location R; sample obtained from 30 feet	Turbid
E2Q07	GW-A-11 (GW35)	Direct push sample obtained from 53532 Lane Street; sample obtained from 11 feet	Cloudy
E2Q08	GW-A-18 (GW36)	Direct push sample obtained from 53532 Lane Street; sample obtained from 18 feet	Cloudy
E2Q09	GW-A-30 (GW37)	Direct push sample obtained from 53532 Lane Street; sample obtained from 30 feet	Cloudy
E2Q10	GW-B-8 (GW48)	Direct push sample obtained form the south side of the Voyager, Inc. facility; location B, sample obtained from 8 feet	Cloudy
E2Q11	GW-B-18 (GW49)	Direct push sample obtained form the south side of the Voyager, Inc. facility; location B, sample obtained from 18 feet	Cloudy
E2Q12	GW-B-48 (GW48)	Direct push sample obtained form the south side of the Voyager, Inc. facility; location B, sample obtained from 30 feet	Cloudy
E2Q13	GW31	53553 Lane Street	Sample obtained from outside spigot, it does not go through a filter
E2Q14	GW32	53601 Lane Street	None reported
E2Q15	GW41	53635 Lane Street	None reported
E2Q16	GW42	53657 Lane Street	Sample obtained from 50 foot hose
E2Q17	GW43	53706 Lane Street	Sample obtained from front spigot
E2Q18	GW44	53615 Lane Street	Sample obtained from front spigot
E2Q19	GW45	53684 Lane Street	Sample obtained from front spigot
E2Q20	GW46	53668 Lane Street	Sample obtained from front spigot

Sample Location and Comment Table (Continued)

CLP ID	Sample ID	Sample Location	Comments
E2Q21	GW55	53652 Lane Street	Sample obtained from front spigot
E2Q22	GW56	53634 Lane Street	Sample obtained from front spigot
E2Q23	GW-D-8 (GW58)	Direct push sample obtained from the south side of Riverside Tool; near CR106; sample obtained from 8 feet	Cloudy
E2Q24	GW-D-18	Direct push sample obtained from Riverside Tool parking lot, adjacent to Elkhart Metal garage door, sample obtained from 8 feet	Slightly cloudy
E2Q04	GW-O-8 (GW26)	Direct push sample obtained from north part of Riverside Tool property near ditch, of ditch location 0; sample obtained from 8 feet	Very cloudy
E2Q25	GW-D-30 (GW61)	Direct push sample obtained form the south side of Riverside Tool; near CR 106; sample obtained from 30 feet	Cloudy
E2Q26	GW-D-18 (GW60)	Same as E2Q24	Duplicate of E2Q24
E2Q27	GW-D-rinsate (GW62)	Equipment/Rinsate Sample	Equipment Blank
E2Q28	GW-F-8 (GW70)	Direct push sample obtained from south of the Elkhart Metal Distributing near CR 106; sample obtained from 8 feet	Cloudy
E2Q29	GW-F-18 (GW71)	Direct push sample obtained from south of the Elkhart Metal Distributing near CR 106; sample obtained from 18 feet	Slightly cloudy
E2Q30	GW-F-30 (GW72)	Direct push sample obtained from south of the Elkhart Metal Distributing near CR 106; sample obtained from 8 feet	Slightly cloudy
E2Q31	GW-G-8 (GW77)	Direct push sample obtained from southeast of the Elkhart Metal Distributing near CR 106; sample obtained from 8 feet	Cloudy
E2Q32	GW-P-8 (GW90)	Direct push sample obtained from northeast corner of the Elkhart Metal Distributing near ditch; sample obtained from 8 feet	Cloudy
E2Q36	GW76	Trip Blank	Clear, odorless
E2Q37	GW-G-30 (GW84) (E2PY4)	Direct push sample obtained form southeast of the Elkhart Metal Distributing near CRT 106; sample obtained from 30 feet	Used slotted spoon
E2Q38	GW93	Trip Blank	Clear, odorless
E2Q40	GW-X-30 (GW114)	Direct push sample obtained from west of former Dygert Seating facility, off of door, north of ditch, sampled obtained from 8 feet	Clear ; Note: at 4:30 pm on 4/16/08, sampler noted a fresh white milky liquid on the ground near the 2nd door from south of building

Sample Location and Comment Table (Continued)

CLP ID	Sample ID	Sample Location	Comments
E2Q41	GW-X-18 (GW115)	Direct push sample obtained from west of former Dygert Seating facility, north of ditch, sampled obtained from 18 feet	Slightly turbid, grayish
E2Q42	GW-X-8 (GW116)	Direct push sample obtained from west of former Dygert Seating facility, off of door, north of ditch, sampled obtained from 8 feet	None reported
E2Q46	GW-X-8dup (GW117)	Same as E2Q42	Duplicate of E2Q42
E2Q60	GW-U-8 (GW100)	Direct push sample obtained from behind the Hadley Building by north back door near gas line, sample obtained from 8 feet	None reported
E2Q61	GW-U-30 (GW101)	Direct push sample obtained from behind the Hadley Building by north back door near gas line, sample obtained from 30 feet	Sample collected through slotted rod
E2Q62	GW-U-18 (GW102)	Direct push sample obtained from behind the Hadley Building by north back door near gas line, sample obtained from 30 feet	Sample collected through slotted rod
E2Q63	GW-W-8 (GW110)	Direct push sample obtained from west center side of the Hadley Building	Sample collected through slotted rod
E2Q64	GW-W-18 (GW111)	Direct push sample obtained from west center side of the Hadley Building	Sample collected through slotted rod
E2Q65	GW-W-18 (GW112)	Same as E2Q64	Duplicate of E2Q64
E2Q66	GW-W-30 (GW113)	Direct push sample obtained from west center side of the Hadley Building	Sample collected through slotted rod
E2Q72	GW-Z-30	Direct push sample obtained from location Z, south part of CQC property, north of ditch sample obtained from 30 feet	None reported
E2Q74	GW132	Investigative derived waste (IDW) water	Rusty drum
E2Q75	GW130	IDW Water	New drum
E2Q77	GW126	Trip Blank	Clear, odorless
E2Q78	GW131	Trip Blank	Clear, odorless
E2Q85	GW-Y-30 (GW120)	Direct push sample obtained from location Y, south central portion of Hadley building, sample obtained from 30 feet	Cloudy with suspended solids, odorless
E2Q83	GW-Y-8 (SGW118)	Direct push sample obtained from location Y, south central portion of Hadley building, sample obtained from 8 feet	Clear, odorless
E2Q84	GW-Y-18 (GW119)	Direct push sample obtained from location Y, south central portion of Hadley building, sample obtained from 18 feet	Little cloudy, odorless

Sample Location and Comment Table (Continued)

CLP ID	Sample ID	Sample Location	Comments
E2Q86	GW-N-8 (GW121)	Direct push sample obtained from location N, east of Riverside Tool parking lot, outside of Elkhart Metal building; sample obtained from 8 feet	None Reported
E2Q87	GW-N-8 (GW122)	Same as E2Q86	Duplicate of E2Q86
E2Q88	GW-N-18 (GW123)	Direct push sample obtained from location N, east of Riverside Tool parking lot, outside of Elkhart Metal building; sample obtained from 18 feet	Clear, odorless
E2Q89	GW-N-18 (GW124)	Same as E2Q88	Duplicate of E2Q89
E2Q90	GW-N-30 (GW125)	Direct push sample obtained from location N, east of Riverside Tool parking lot, outside of Elkhart Metal building; sample obtained from 30 feet	Very cloudy, odorless
E2Q92	GW-Z-8 (GW127)	Direct push sample obtained from location Z, south part of CQC property, north of ditch sample obtained from 8 feet	Cloudy, odorless
E2Q93	GW-Z-18 (GW128)	Direct push sample obtained from location Z, south part of CQC property, north of ditch sample obtained from 18 feet	Cloudy, odorless
E2Q95	GW-V-13 (GW105)	West of former Dygert building near fence, north of ditch, sampled at 13 feet	None reported
E2Q96	GW109	Northland Drive Industrial Park 23843 County Road 6	Yellowish
E2Q97	GW108	Trip Blank	Clear, odorless
E2Q98	GW103	Trip Blank	Clear, odorless
E2Q99	GW-T-30 (GW99)	West of former Dygert Building near fence, north of ditch, sampled from 30 feet	Cloudy, slightly turbid

Two direct push samplers were in operation at the site to facilitate the collection of ground water and subsurface soil samples. Samples were generally collected from depths of 8 feet (corresponding to the position of the water table), 18 feet, and 30 feet below the ground surface, except when ground water was not encountered at 8 feet (such as sample E2Q07) or topographic concerns required modification of the sampling plan (such as sample E2Q07). For the ground water samples collected with the IDEM direct push sampler, a 3 ft long protected screen was advanced inside an outer sheath, until the screen was exposed at the desired depth. For the ground water samples collected with the EPA direct push sampler, a 4 ft long slotted screen was advanced until the desired depth. In both sampling methods, plastic tubing was placed down the rods to the level of the well screen. New tubing was used for each ground water grab sample depth interval. A peristaltic pump was used to purge at least three rod volumes of ground water before each sample was collected. Samples were collected with the peristaltic pump at a low flow rate to minimize volatilization of any contaminants present. Samples were placed on ice after they were collected and transported to a central location for screening and analysis. After grab samples were collected from all three depth intervals at a sampling location, the screen and all of the direct push rods were removed from the ground and thoroughly decontaminated with brushes and an Alconox and tap water rinse.

An equipment blank was collected after the direct push rods were decontaminated following the collection of samples from location E, which was believed to contain TCE contamination. Tap water that was used as a final rinse was sprayed inside the top

of the slotted screen and collected in 40 ml vials placed at the bottom of the screen.

All ground water samples collected from the residential wells were obtained by first purging the well (allowing the well to run for 15 minutes) and then allowing the water to flow directly into the samples jars from the spigot. Nitrile surgical gloves were worn and discarded between the collection of each sample.

At the time of the collection of the ground water samples, two field screening laboratories were used to screen samples for chlorinated VOCs prior to EPA Contract Laboratory analysis. Therefore, IDEM staff obtained three separate volumes (nine 40 ml vials) of each sample; one for each of the two field screening laboratories and one for EPA's Contract Laboratory Program (CLP).

IDEM staff made arrangements through the Elkhart County Health Department to secure office space near Lane Street Ground Water Contamination to conduct field screening and other sampling related activities.

IDEM staff utilized the Voyager portable Gas Chromatograph (GC) instrument for screening of ground water samples. The instrument provided 'real-time' qualitative screening results. This allowed for the expedited investigation into the extent of the contaminant plume without having to wait for laboratory results and provides a qualitative scale for comparison of contaminated samples. The Voyager portable GC was capable of

screening for VOCs in the gaseous phase (indoor/outdoor air, soil gas, sample headspace, etc.). Through the use of the internal separation column(s) and comparison with established retention time calibration data, it was possible to both identify the contaminants present and to establish a relative concentration of the contaminant in the gaseous sample. For the Lane Street sampling event, the Voyager portable GC was calibrated for Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX), Methyl tert-butyl ether (MTBE), Tetrachloroethylene (PCE), TCE, Vinyl Chloride, and 1, 2-Dichloroethane (DCA). Please see Appendix N.

In addition to IDEM's portable GC screening activities, Techlaw's Environmental Sampling Assistance Team (ESAT) was tasked to operate their mobile laboratory at Lane Street Ground Water Contamination as a part of their Field Analytical Support Program (FASP) Task Order, under the U.S. EPA Superfund program. ESAT are contractors to U.S. EPA, Region 5. The mobile laboratory was deployed at the Elkhart Waste Water Treatment Plant (WWTP) during this operation. While in the field, ESAT analyzed water and soil samples in their mobile laboratory using a GC with a mass spectrometer (GC/MS) detector in order to provide both qualitative identification and quantitative data for VOCs on a rapid turn around time. To this end, they provided two chemists for full time analysis in support of this operation. ESAT was able to analyze seventy

seven (77) samples over a six day period from April 17 through April 22, 2008. Please see Appendix O.

The samples were screened in the field from the two field laboratories and the results were used by IDEM geologists to assist with the determination of the next sample location. At the time ground water samples E2PY0, E2PX6, and E2PX3 were collected, a piezometer was installed at each of the three ground water sample locations using IDEM's direct push sampler.

3.4 Soil Sample Collection

Eleven soil samples were collected at the site using direct push methods. The soil samples are identified **as** E2Q03, E2Q47 through E2Q53, E2Q73, E2Q76, and E2Q91. The Soil Sample Location and Comment Table, page 3-19, depicts the location and any comments regarding each soil sample. Please refer to the Soil Sample ID Location Map, Appendix H, for an aerial view of the location of each soil sample. Appendix D contains pictures of the samples and where they were obtained.

The direct push dual tube system was used to advance an outer casing into the subsurface. An acetate liner was then advanced with an inner rod, so that continuous soil cores could be recovered. The liners were split open and quickly screened for the presence of contamination with a photoionization detector(PID). Since none of the recovered soil samples showed elevated PID readings, the sample from the smear zone immediately above the water table was collected for lab analysis. Samples were collected with dedicated purge-and-trap soil samplers to

Soil Sample Location and Comment Table (Table 2)

CLP ID	Sample ID	Sample Location	Comments
E2Q03	S-0-7 (SS1)	Direct push sample obtained from Riverside Tool; north end of property	Saturated fine sand
E2Q47	S-T (SS2)	Location T, north central side, of Hadley property, 6 feet depth	Sand, red brown
E2Q48	S-W (SS3)	West of former Dygert facility, 8 feet depth	None reported
E2Q49	S-V (SS4)	Southwest boring on the Hadley facility, 9 feet depth	Brown sand
E2Q50	S-X (SS5)	At back door (W) of the Hadley facility, 8 feet depth	None reported
E2Q51	S-Xdup (SS6)	Same as E2Q50	Duplicate of E2Q50
E2Q52	SS-1 (SS7)	SW corner of the Hadley facility, 6 feet depth	None reported
E2Q53	SS-2 (SS9)	East of T on the Hadley facility, 6 feet depth	Sand
E2Q91	SS-m (SS8)	Direct push sample obtained at location M; east of Riverside Tool parking lot, adjacent to Elkhart Metal garage door, sample obtained from 8 feet depth	Sandy, yellowish
E2Q73	SS-Z (SS10)	Sample collected at location Z at 4 feet bgs	None reported
E2Q76	SS-11	Investigative soil sample from drum	None reported

volatilization. The soil samples were placed on ice after they were collected and transported to the field mobile laboratories for screening and analysis.

The laboratory results from the sampling have been determined to be acceptable for use and meet the criteria contained under IDEM quality criteria. Any exceptions to the acceptance of this data will be identified in the Quality Assurance/Quality Control memorandums by the U.S. EPA chemists and IDEM chemists. Please refer to the Analytical Results in Appendix C.

Section IV

Discussion of Migration Pathways

4.1 Introduction

Potential migration pathways for contaminants emanating from Lane Street Ground Water Contamination are discussed in this section. Potential contaminant migration through ground water, surface water (including the drinking water threat, human food chain threat, and environmental threat) threat), soil exposure and air are discussed.

4.2 Groundwater Pathway

The site is located in the Kankakee Outwash and Lacustrine Plain of the Northern Moraine and Lake Region physiographic unit in northern Indiana (Malott, 1922). Unconsolidated deposits in this area consist of thick units of Wisconsinan-aged glacial outwash deposits that were deposited by ice advances of the Saginaw and Erie Lobes approximately 15,000 years ago (Wayne, 1966). Approximately 150 ft of unconsolidated deposits overlie Devonian and Mississippian-aged shale bedrock units of the Antrim and Ellsworth Formations. In the vicinity of the site, an unconfined surficial aquifer consisting of sand and gravel units extends to a depth at least 50 feet below the ground

surface. The upper aquifer and a lower, confined, sand and gravel aquifer that extends to the bedrock surface are separated by an extensive confining unit that is between 0 and 50 feet thick across the northwestern part of the county (Arihood and Cohen, 1997). Soils at the site have been classified as "Plainfield fine sand, 0-2% slopes", which is described as "deep, excessively drained and somewhat excessively drained, coarse-textured soil that developed in sandy outwash" (USDA, 1974). The soils are up to 60 inches thick and have a very high permeability (>20 inches per hour).

Hydraulic conductivity values for the aquifers are estimated (by calibrated ground water flow models) to be on the order of magnitude of 10-1 to 10-2 cm/s. The depth to ground water in Elkhart County ranges from 6 to 15 feet below the ground surface. At the time of sampling, ground water was present at the site at a depth of 6 feet. Ground water flow is to the south-southwest towards the St. Joseph River, which is located approximately 1.4 miles south of the site. Ground water usage is high in the vicinity of the site. At least 100 residential drinking water wells have been identified within 1 mile of the site. The majority of these wells are screened in the surficial sand and gravel unit less than 35 ft below the ground surface. It should be noted that not all well logs exist for the private wells located near Lane Street. The site is located

approximately 2.5 miles northwest of the City of Elkhart municipal water wells and is outside of the 10-year time of travel, the farthest limit of the wellhead protection area.

No storm sewers are present in the vicinity of the site and drainage is mainly internal. As a result, the potential for contamination flowing directly into surface water by way of the surface water pathway is negligible. However, several small lakes and ponds that could serve as local ground water discharge points are located between the site and the river. Ground water from the area of the site discharges directly into the St. Joseph River.

From April 14 to April 17, 2008, two direct push samplers were used to obtain ground water samples in an attempt to locate the source of the ground water contamination. Ground water samples were generally collected from depths of 8 feet (corresponding to the position of the water table), 18 feet, and 30 feet below the ground surface, except when ground water was not encountered at 8 feet or topographic concerns required modification of the sampling plan. Concurrent with the direct push investigation, water samples were also collected from private wells owned by residents and businesses in the vicinity of Lane Street Ground Water Contamination.

Several chlorinated VOCs were detected in many of the Geoprobe ground water samples obtained. TCE were detected in

samples E2PP2, E2PP8, E2PP9, E2PQ1, E2PQ2, E2PQ3, E2PQ8, E2PR0, E2PR2, E2PS5, E2PS6, E2PS7, E2PT0, E2PT1, E2PT4, E2PT5, E2PT6, E2PT7, E2PX3, E2PX4, E2PX6, E2PX7, E2PX8, E2PY5, E2PY6, E2PZ3, E2PZ4, E2PZ5, E2PZ6, E2PZ7, E2PZ8, E2PZ9, E2Q01, E2Q07, E2Q08, E2Q09, E2Q11, E2Q12, E2Q14, E2Q17, E2Q18, E2Q21, E2Q24, E2Q25, E2Q26, E2Q40, E2Q41, E2Q42, E2Q46, E2Q61, E2Q62, E2Q64, E2Q65, E2Q66, E2Q72, E2Q86, E2Q87, E2Q88, E2Q89, E2Q90, E2Q93, and E2Q95 at concentrations ranging from 0.11 to 770 µg/L. PCE was found in samples E2Q23, E2PR1, E2PQ9, E2Q72, E2Q62, and E2Q93 at concentrations ranging from 0.077 to 19 µg/L. Trans-1,2 dichloroethylene (DCE) were found in samples E2PP6, E2PP8, E2PR0, E2PR7, E2PR8, E2PX6, E2Q40, and E2Q90 at concentrations ranging from 0.087 to 0.75 µg/L. Cis-1,2 DCE was present in samples E2PP6, E2PP8, E2PQ2, E2PQ8, E2PQ9, E2PR0, E2PR2, E2PR3, E2PR7, E2PR8, E2PT1, E2PT4, E2PZ3, E2Q14, E2Q26, E2Q40, and E2Q90 at concentrations ranging from 0.32 to 32 µg/L. 1,1,1-trichloroethane (TCA) were found in samples E2PP2, E2PP8, E2PP9, E2PQ1, E2PR2, E2PS5, E2PS6, E2PS7, E2PT4, E2PT5, E2PT7, E2PX6, E2PX7, E2PX8, E2PY0, E2PY1, E2PY5, E2PY6, E2PZ3, E2PZ4, E2PZ5, E2PZ6, E2PZ7, E2PZ8, E2PZ9, E2Q01, E2Q08, E2Q09, E2Q24, E2Q25, E2Q41, E2Q42, E2Q46, E2Q62, E2Q64, E2Q65, E2Q84, E2Q89, E2Q90, E2Q93, and E2Q95 at concentrations of 0.16 to 57 µg/L. 1,1-DCA were found in samples E2PP2, E2PP6, E2PP8, E2PQ2, E2PQ4, E2PQ8, E2PR0, E2PR2, E2PR6, E2PR7, E2PR8, E2PS5, E2PS6, E2PS7, E2PT0,

E2PT1, E2PT4, E2PT5, E2PX3, E2PX6, E2PY0, E2PY5, E2PY6, E2PZ3, E2PZ4, E2PZ7, E2PZ8, E2PZ9, E2Q01, E2Q09, E2Q14, E2Q24, E2Q25, E2Q26, E2Q61, E2Q66, E2Q89, E2Q90, E2Q95 at concentration ranging from 0.041 to 10 µg/L. Please refer to the EPA Contract Laboratory Chemical Analysis found in Appendix C for the concentration of VOCs detected at each sample.

As mentioned in Section 3.3, ground water samples were screened in the field from two field laboratories and the results were used by IDEM geologists to assist with the determination of the next sample location. The screening results were similar to the CLP lab results. Sample locations were based on the degree of contamination in the screening samples and the direction of ground water flow. Samples were also positioned to establish the width of the contaminant plume that is impacting the private residential wells on Lane Street. Refer to the IDEM Voyager sample results and ESAT sample results in Appendices N and O. The sample results are plotted on the IDEM Voyager Gas Chromatograph-Field Screening Map (Appendix F) and the EPA FASP Step Van Map (Appendix G). As a result of utilizing the screening laboratories, staff was able to follow the ground water plume north/northeast of Lane Street, and as discussed below, the center and flanks of the plume were identified. It should be noted that nine (9) ground water samples that were obtained from a depth of 8 feet had detections of chlorinated VOCs. Those samples are identified as E2Q46, E2PZ9, E2Q42, E2Q46, E2PZ6, E2Q86, E2Q87, E2Q23, and E2PX8. E2Q46 was a duplicate of E2Q42 and E2Q87 was a duplicate of E2Q86. Samples E2Q01 and E2Q95 (E2Q95 being a duplicate of E2Q01) were obtained at a depth of 13 feet (not 8 feet as other shallow Geoprobe

ground water samples). No chlorinated VOCs were detected in these shallow samples. Samplers noted that the area where samples E2Q01 and E2Q95 were obtained was notably several feet higher in elevation. Therefore shallow ground water samples were obtained from 13 feet to compensate for the difference in elevation. The detection of chlorinated VOCs in the shallow ground water samples may indicate that the samples were obtained near a possible source area.

On the eastern portions of the sampling area, no detectable chlorinated VOCs were found in samples E2Q28, E2Q29, E2Q30, E2Q31, E2PY3, E2Q37, E2Q83, E2Q85, and E2Q99. Also on the eastern portions of the sampling area, chlorinated VOCs were detected below MCLs in samples E2PP9, E2PQ1, and E2Q84. On the western portion of the sampling area, chlorinated VOCs were not detected in samples E2PX5, E2Q10, E2PY2, E2Q04, E2Q05, and E2Q06; they were however, detected below the MCL in E2PY1, E2PY0, E2PX3, E2PX4, E2Q11, and E2Q12. Chlorinated VOC concentrations observed between the eastern and western edges of the sampling area were substantially higher than detections on the fringe of the sampling area. Please refer to the CLP Ground Water VOC Concentration Map in Appendix K for details.

As stated in Section 2.2 of this report, the Geocel Facility believes they have defined the eastern and western edges of their ground water plume based on investigations that they conducted in response to the discovery of their release.

Chlorinated levels below MCLs were found in ground water samples collected from Geocel's monitoring wells MW-1s, MW-1d, MW-13, MW-23i, MW-23D46, MW-34s, MW-34i, MW-34D46, MW-35i, MW-35D49, MW-36i, MW-36D49, MW-37s, MW-37i, MW-37D48, MW-38s, MW-38i, MW-38D48, MW-40i, and MW-40D46 on the western side of the Geocel plume. Please refer to Appendices P and Q, Geocel Map North Half and Geocel Map South Half.

By installing three piezometers at sample locations E2PY0, E2PX3, and E2PX6, IDEM staff was able to construct a potentiometric surface map. IDEM staff determined that ground water flow in the immediate area of Lane Street was in a southwesterly direction. Please refer to the Potentiometric Surface Map (Appendix L).

TCE and other breakdown products were detected in Sixteen (16) residential ground water samples (E2PS5 through E2PS7, E2PR0, E2PR2, E2PQ2, E2PQ8, E2PT0, E2PT1, E2PT4, E2PT5, E2PR1, E2Q14, E2Q17, E2Q18, E2Q21). Samples E2PQ2 is a duplicate of E2PRO, E2PS7 is a duplicate of E2PS6, and E2PT5 is a duplicate of E2PT4. TCE ranged from 0.24 µg/l to as high as 390 µg/l in these residential wells. Please refer to the CLP Ground Water VOC Concentration Maps A and B (Appendices J and K), for an aerial view of the concentrations of all of the contaminants at each sample location.

It should be noted that low concentrations of toluene, benzene, and xylene compounds were also detected in some ground

water samples. The Key Findings List, starting on page 4-11, depicts those ground water samples that were found to contain VOCs above detection and greater than three times background.

4.3 SURFACE WATER PATHWAY

No storm sewers are present in the vicinity of the site and drainage is mainly internal. As a result, the potential for contamination flowing directly into surface water is negligible. There is no overland flow probable point of entry for the overland flow pathway. However, several small lakes and ponds that could serve as local ground water discharge points are located between the site and the river. The small lakes and the river is within 1.5 miles of the site. Groundwater from the area of the site discharges directly into the St. Joseph River. Assuming that the direction of ground water flow is directly to the south and the width of the plume is approximately ¾ mile in width when it reaches the river, the probably point of entry for the discharge of ground water to surface water is between Marguerite Ave. to the west and Shorelane East to the east. Refer to the 15 Mile Surface Water Pathway Map, Appendix B, which shows the approximate location of the probable point of entry (PPE) and the 15 miles surface water pathway from the PPE. Surface water samples, down gradient from Lane Street, would

need to be obtained to determine if a release to the surface water pathway has occurred.

4.3.1 Drinking Water Threat

All residents within the 4 mile radius of Lane Street Groundwater Contamination obtain drinking water from private and municipal wells. There are no known surface water intakes located within the 15 mile surface water pathway that are being solely used as human drinking water sources. There does not appear to be a drinking water threat in the surface water pathway.

4.3.2 Human Food Chain Threat

The St. Joseph River is considered a fishery. As stated in Section 4.3, the potential for contaminants to flow directly into the surface water is negligible. Currently there are no known fish advisories regarding VOCs in aquatic life residing in the St. Joseph River.

4.3.3 Environmental Threat

Currently there are no known contaminants in surface soils that could impact any sensitive environments. No samples were collected to determine if any environmental threat exists.

4.4 Soil Exposure

The site lies in a residential area. Soils

outlined within the study area of the Lane Street Ground Water Contamination are accessible to the public and workers of businesses located in the Lane Street area. Nine (9) subsurface soil samples were obtained from the direct push samlers. The soil samples were obtained in an attempt to identify a source area. Analysis of the soil samples did not reveal any VOCs. There are no schools or daycare facilities within 200 feet of the site. Refer to the 4-Mile Radius Map, Appendix A, for the population within each distance ring. No surface soil samples were collected as part of this Site Inspection. There is no known exposure to contaminated surface soil.

4.5 Air

No air samples were collected. Presently, there are no reports of adverse health effects potentially resulting from the migration of any solvents or odors in the area. The potential may exist for vapor intrusion of VOCs into the indoor air of the residents' homes located near and along Lane Street. However, this information was not collected at this time.

Table 3
Key Findings for Ground Water Samples
(Lane Street, Elkhart, Elkhart County, Indiana)
EPA ID: INN000510229

The following sample numbers are considered background samples:

E2Q92	**E2Q60**	**E2Q63**	**E2Q04**
E2Q05	**E2Q96**	**E2PR4**	**E2PT8**
E2Q99	**E2Q06**	**E2PR5**	

A number of the groundwater grab samples collected in this investigation were collected up-gradient and side-gradient of the areas of highest contamination and can be considered "background" samples to determine the concentration of chlorinated VOCs that are migrating into the Lane Street Ground Water Contamination study area. No chlorinated VOCs were found in the shallow part of the aquifer in samples E2Q92, E2Q60, E2Q63, and E2Q04; in the intermediate part of the aquifer in sample E2Q05; and in the deep part of the aquifer in samples E2Q96, E2PR4, E2PT8, E2Q99, E2Q06, and E2PR5. Therefore, samples E2Q92, E2Q60, E2Q63, E2Q04, E2Q05, E2Q96, E2PR4, E2PT8, E2Q99, E2Q06, and E2PR5 can be considered background samples.

For the qualifier "J": If the analyte was positively identified, the associated numerical value is an approximate concentration of the analyte in the sample.

Some VOC samples had analyte concentrations which exceeded the instruments' calibration range. These samples were then diluted to bring them back into range. The results from the diluted analyses should be considered the final concentrations for the affected analytes.

VOCs were found in the following samples at concentrations greater than three times background. Some trace volatiles samples had analyte concentrations which were below the instruments' calibration range and are not included in this Key Findings list. All sample concentration units are in µg/L.

E2PP2

1,1-Dichloroethane	0.92
1,1,1-Trichloroethane	14
Benzene	0.42J
Trichloroethylene	420
Toluene	0.75

E2PP6

1,1-Dichloroethane	0.66
cis-1,2-Dichloroethylene	21
trans-1,2-Dichloroethylene	0.53

E2PP8

1,1-Dichloroethane	3.7
1,1,1-Trichloroethane	0.63
cis-1,2-Dichloroethylene	0.32J
Trichloroethylene	4.6
Toluene	0.38J
trans-1,2-Dichloroethylene	0.087J

E2PP9

1,1,1-Trichloroethane	0.25J
Benzene	0.47J
m,p-Xylene	0.39J
Trichloroethylene	0.38J
Toluene	0.93

E2PQ1

1,1,1-Trichloroethane	1.6
Ethyl benzene	0.13J
m,p-Xylene	0.19J
Trichloroethylene	1.6
Toluene	0.5

E2PQ2

1,1-Dichloroethane	13
cis-1,2-Dichloroethylene	0.67
Trichloroethylene	220

E2PQ3

Trichloroethylene	0.35J

E2PQ4

1,1-Dichloroethane	0.44J

1,1,2-Trichloroethane	0.018J

E2PQ8

1,1-Dichloroethane	5.2
cis-1,2-Dichloroethylene	0.76
Trichloroethylene	200

E2PQ9

cis-1,2-Dichloroethylene	1.7
Tetrachloroethylene	0.1

E2PR0

1,1-Dichloroethane	2.7
cis-1,2-Dichloroethylene	0.7
Trichloroethylene	330
trans-1,2-Dichloroethylene	0.1

E2PR1

Tetrachloroethylene	0.087

E2PR2

1,1-Dichloroethane	3.7
1,1,1-Trichloroethane	16
cis-1,2-Dichloroethylene	0.77
Trichloroethylene	300
Toluene	0.11

E2PR3

cis-1,2-Dichloroethylene	0.85

E2PR6

1,1-Dichloroethane	2.3

E2PR7

1,1-Dichloroethane	0.42J
cis-1,2-Dichloroethylene	32J
trans-1,2-Dichloroethylene	0.58

E2PR8

1,1-Dichloroethane	0.44
cis-1,2-Dichloroethylene	31J
trans-1,2-Dichloroethylene	0.75

E2PS5

1,1-Dichloroethane	10
1,1,1-Trichloroethane	3
Trichloroethylene	80

E2PS6

1,1-Dichloroethane	4.1
1,1,1-Trichloroethane	15
Trichloroethylene	8.5J

E2PS7

1,1-Dichloroethane	3.8
1,1,1-Trichloroethane	14
Trichloroethylene	7.6

E2PT0

1,1-Dichloroethane	2
Trichloroethylene	2.5

E2PT1

1,1-Dichloroethane	6.5
cis-1,2-Dichloroethylene	0.38J
Trichloroethylene	9.9

E2PT4

1,1-Dichloroethane	7.6
1,1,1-Trichloroethane	0.43J
cis-1,2-Dichloroethylene	0.42J
Trichloroethylene	50

E2PT5

1,1-Dichloroethane	7.7
1,1,1-Trichloroethane	0.36J
Trichloroethylene	66J

E2PT6

Benzene	0.41J
Ethyl benzene	0.26J
m,p-Xylene	0.39J
Trichloroethylene	0.81
Toluene	0.81

E2PT7

1,1,1-Trichloroethane	1.7
Benzene	0.53
Trichloroethylene	4.7
Toluene	0.85

E2PT8

Benzene	2
Toluene	2

E2PX3

1,1-Dichloroethane	3
Trichloroethylene	2.7
Toluene	0.19J

E2PX4

Trichloroethylene	0.41J

E2PX6

1,1-Dichloroethane	0.46J
1,1,1-Trichloroethane	0.38J
Benzene	0.48J
Ethyl benzene	0.27J
m,p-Xylene	0.42J
o-Xylene	0.19J
Trichloroethylene	90
Toluene	0.95
trans-1,2-Dichloroethylene	0.18J

E2PX7

1,1,1-Trichloroethane	5.8
Benzene	0.67
Ethyl benzene	0.25J
m,p-Xylene	0.38J
Trichloroethylene	360
Toluene	1.1

E2PX8

1,1,1-Trichloroethane	0.52
Benzene	0.57
Ethyl benzene	0.38J
m,p-Xylene	0.5
o-Xylene	0.23J
Trichloroethylene	29J
Toluene	1.1

E2PY0

1,1-Dichloroethane	0.11J
1,1,1-Trichloroethane	0.16J
Toluene	0.3J

E2PY1

1,1,1-Trichloroethane	0.48J
Benzene	0.65
Toluene	1

E2PY2

Toluene	0.97

E2PY5

1,1-Dichloroethane	0.041J
1,1,1-Trichloroethane	1.2
Trichloroethylene	10

E2PY6

1,1-Dichloroethane	0.49J
1,1,1-Trichloroethane	0.58
Benzene	0.49
Ethyl benzene	0.35J
m,p-Xylene	0.58
Trichloroethylene	11
Toluene	1.2

E2PZ3

1,1-Dichloroethane	0.62
1,1,1-Trichloroethane	8.8
cis-1,2-Dichloroethylene	0.32
Trichloroethylene	440

E2PZ4

1,1-Dichloroethane	0.29
1,1,1-Trichloroethane	7.3
m,p-Xylene	0.39
Trichloroethylene	410
Toluene	1

E2PZ5

1,1,1-Trichloroethane	6.5
Trichloroethylene	320
Toluene	1.2

E2PZ6

1,1,1-Trichloroethane	0.87
Trichloroethylene	29J
Toluene	0.47J

E2PZ7

1,1-Dichloroethane	1.1
1,1,1-Trichloroethane	2.1
Trichloroethylene	65J
Toluene	0.27J

E2PZ8

1,1-Dichloroethane	0.27J
1,1,1-Trichloroethane	7.3
Trichloroethylene	140J
Toluene	0.77

E2PZ9

1,1-Dichloroethane	0.14J
1,1,1-Trichloroethane	3.2
Benzene	0.68
m,p-Xylene	0.3J
o-Xylene	0.14J
Trichloroethylene	79J
Toluene	1.1

E2Q01

1,1-Dichloroethane	0.34J
1,1,1-Trichloroethane	2.4
Benzene	0.52
m,p-Xylene	0.28J
Trichloroethylene	84
Toluene	0.84

E2Q04

Ethyl benzene	0.14J
m,p-Xylene	0.24J
Toluene	0.46J

E2Q06

Toluene	0.16J

E2Q07

Benzene	0.33J
Ethyl benzene	0.28J
m,p-Xylene	0.33J
o-Xylene	0.16J
Trichloroethylene	0.25J
Toluene	0.77

E2Q08

1,1,1-Trichloroethane	1
Ethyl benzene	0.24J
m,p-Xylene	0.31J
Trichloroethylene	15
Toluene	0.66

E2Q09

1,1-Dichloroethane	3.6
1,1,1-Trichloroethane	61
Trichloroethylene	78
Toluene	0.28J

E2Q11

Ethyl benzene	0.12J
m,p-Xylene	0.16J
Trichloroethylene	0.11J
Toluene	0.32J

E2Q12

Trichloroethylene	0.32J

E2Q14

1,1-Dichloroethane	3.8
cis-1,2-Dichloroethylene	0.38J
Trichloroethylene	1.3

E2Q17

Trichloroethylene	0.31J

E2Q18

Trichloroethylene	0.24J

E2Q21

Trichloroethylene	0.34

E2Q23

Tetrachloroethylene	0.077

E2Q24

1,1-Dichloroethane	0.6
1,1,1-Trichloroethane	27
Trichloroethylene	150

E2Q25

1,1-Dichloroethane	5.6
1,1,1-Trichloroethane	12
Ethyl benzene	0.22
m,p-Xylene	0.32
o-Xylene	0.14
Trichloroethylene	140
Toluene	0.6

E2Q26

1,1-Dichloroethane	5.3
cis-1,2-Dichloroethylene	0.82
Trichloroethylene	190

E2Q30

m,p-Xylene	0.1J
Toluene	0.15J

E2Q31

Benzene	0.45J
Ethyl benzene	0.42J
m,p-Xylene	0.52
o-Xylene	0.22J
Toluene	1.1J

E2Q37

m,p-Xylene	0.24J
o-Xylene	0.12J
Toluene	0.77

E2Q40

cis-1,2-Dichloroethylene	0.42J
Trichloroethylene	70
trans-1,2-Dichloroethylene	0.56

E2Q41

1,1,1-Trichloroethane	4.5
Trichloroethylene	410
Toluene	0.44J

E2Q42

1,1,1-Trichloroethane	1.8
Benzene	0.73
Ethyl benzene	0.3J
m,p-Xylene	0.46
Trichloroethylene	55
Toluene	1.3

E2Q46

1,1,1-Trichloroethane	1.8
Trichloroethylene	47

E2Q61

1,1-Dichloroethane	0.73
Trichloroethylene	18J

E2Q62

1,1,1-Trichloroethane	2.3
Benzene	0.36J
Ethyl benzene	0.31J
m,p-Xylene	0.39J
Tetrachloroethylene	1.5
Trichloroethylene	24J
Toluene	0.81

E2Q64

1,1,1-Trichloroethane	1.6
Trichloroethylene	55
Toluene	0.23J

E2Q65

1,1,1-Trichloroethane	1.7
Trichloroethylene	35
Toluene	0.17J

E2Q66

1,1-Dichloroethane	1.3
Ethyl benzene	0.15J
m,p-Xylene	0.23J
Trichloroethylene	45
Toluene	0.71

E2Q72

Tetrachloroethylene	1
Trichloroethylene	11

E2Q84

1,1,1-Trichloroethane	0.16
Toluene	0.19

E2Q85

Benzene	0.43
Ethyl benzene	0.2
m,p-Xylene	0.29
o-Xylene	0.15
Toluene	0.8

E2Q86

Ethyl benzene	0.4
m,p-Xylene	0.53
o-Xylene	0.22
Trichloroethylene	4.5

E2Q87

Trichloroethylene	4.6
Toluene	0.38

E2Q88

Benzene	0.44
Trichloroethylene	49

E2Q89

1,1-Dichloroethane	0.21
1,1,1-Trichloroethane	11 "J"
Ethyl benzene	0.14
m,p-Xylene	0.2
Trichloroethylene	770
Toluene	0.38

E2Q90

1,1-Dichloroethane	0.88
1,1,1-Trichloroethane	8
Benzene	0.44
cis-1,2-Dichloroethylene	0.51
Ethyl benzene	0.29
m,p-Xylene	0.41
Trichloroethylene	690
Toluene	1
trans-1,2-Dichloroethylene	0.13

E2Q93

1,1,1-Trichloroethane	1.2
Benzene	0.63
Ethyl benzene	0.41
m,p-Xylene	0.58
Tetrachloroethylene	19
Trichloroethylene	91 "J"
Toluene	1.4

E2Q95

1,1-Dichloroethane	0.41J
1,1,1-Trichloroethane	3
Benzene	0.61
Ethyl benzene	0.22J
m,p-Xylene	0.29J
Trichloroethylene	110
Toluene	1

E2Q99

Toluene	0.40J

Section V

Site Summary and Conclusions

The site was reported to IDEM from a representative of the Elkhart County Health Department (ECHD). The ECHD received a call from a resident who resides on Lane Street. The resident, who obtains drinking water from a private well, had her water analyzed for VOCs. The analysis revealed elevated levels 1560 µg/l of TCE. The maximum contaminant level for TCE in drinking water is 5 µg/l.

Lane Street lies adjacent to a known ground water plume that is being addressed by IDEM's Voluntary Remediation Program (VRP). Geocel, the responsible party for the known ground water plume in the area indicated that the contamination found on Lane Street is from another source because some of the contaminants appear to be different than those detected in the known ground water plume and the geology of the area show the contamination of the known ground water plume appears to be confined to a specific area east of Lane Street.

The site lies in a predominantly residential area, providing many potential affected residents in the event of an release of hazardous materials. Approximately 26 homes on Lane Street utilize private wells for drinking water and their wells have been impacted by VOCs in ground water.

On August 30, 2007, Site Investigation staff sampled the

ground water from thirty nine private wells on and north of Lane Street. Analysis of the ground water samples revealed that the drinking water in eleven residential wells were found to contain levels of VOCs at concentrations above MCLs. IDEM had provided residents with bottled water in September 2007. The U.S.EPA Removal program replaced the bottled water with whole house or point of use carbon filters in October 2007.

From April 14 through April 17, 2008, IDEM staff conducted a Site Inspection at Lane Street Ground Water Contamination. Staff collected 132 ground water samples and nine soil samples. Ground water samples were obtained from private residential wells and from discreet locations from an industrial park utilizing two direct push samplers. IDEM staff also collected nine soil samples in an attempt to try to identify a source area. Staff also determined that ground water flow direction is toward the southwest, from the nearby industrial park toward Lane Street.

Elevated levels of TCE and other breakdown products (including some benzene, toluene, and xylene compounds) were detected in many residential wells (prior to U.S. EPA provided filters). No VOCs were detected in the soil samples collected.

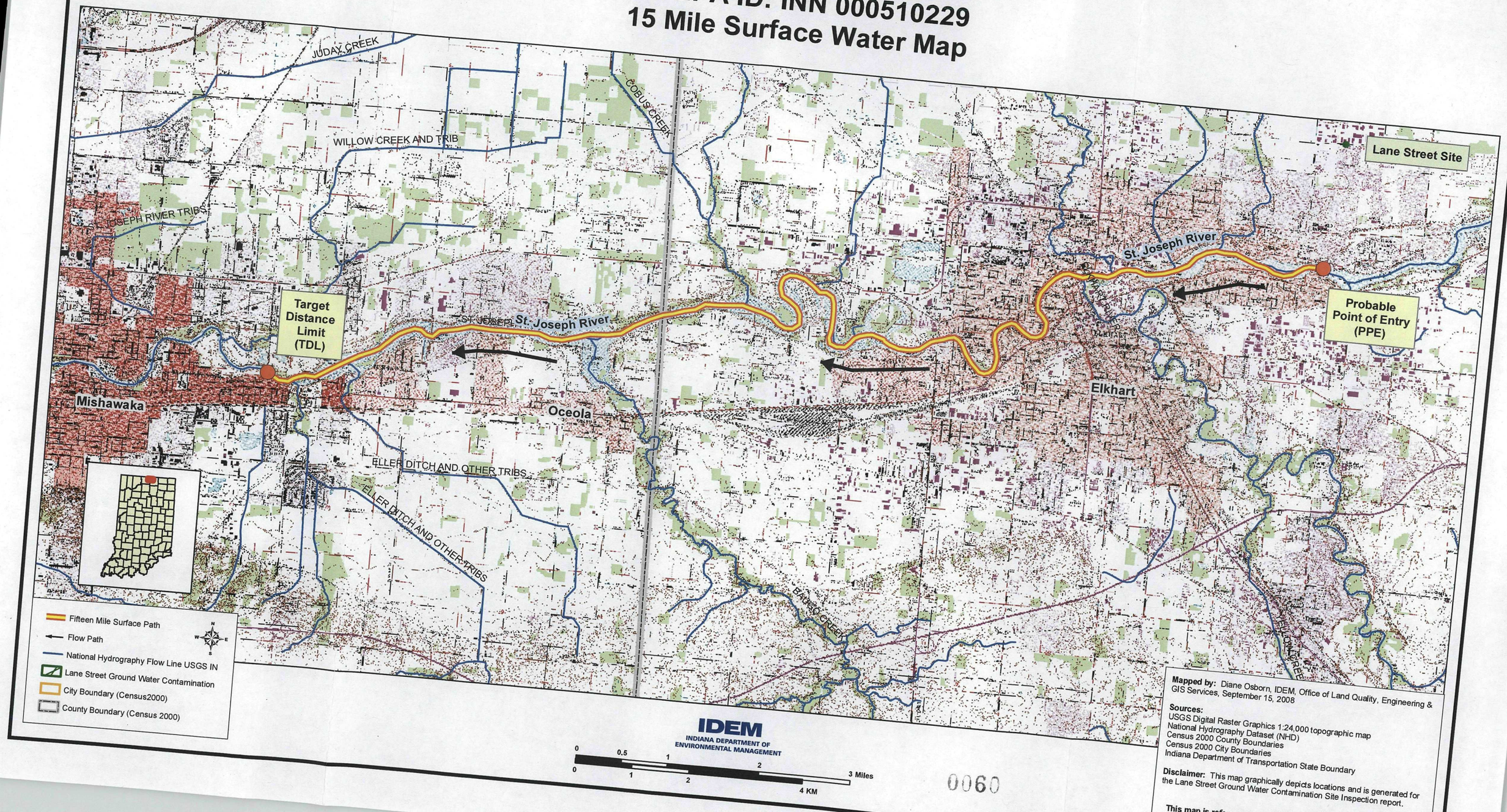
The drinking water in residential wells continues to contain elevated levels of VOCs (some over MCLs) prior to

filters, and additional private wells have the potential to become contaminated because ground water flow is toward more residential wells which are not currently impacted with VOCs.

APPENDIX A

Four Mile Radius Map

Lane Street Ground Water Contamination
Elkhart, Elkhart County, IN
US EPA ID: INN 000510229
15 Mile Surface Water Map



Mapped by: Diane Osborn, IDEM, Office of Land Quality, Engineering & GIS Services, September 15, 2008

Sources:
USGS Digital Raster Graphics 1:24,000 topographic map
National Hydrography Dataset (NHD)
Census 2000 County Boundaries
Census 2000 City Boundaries
Indiana Department of Transportation State Boundary

Disclaimer: This map graphically depicts locations and is generated for the Lane Street Ground Water Contamination Site Inspection report.

This map is referenced in the IDEM Lane Street Ground Water Contamination Site Inspection Report as Appendix B-1

0060

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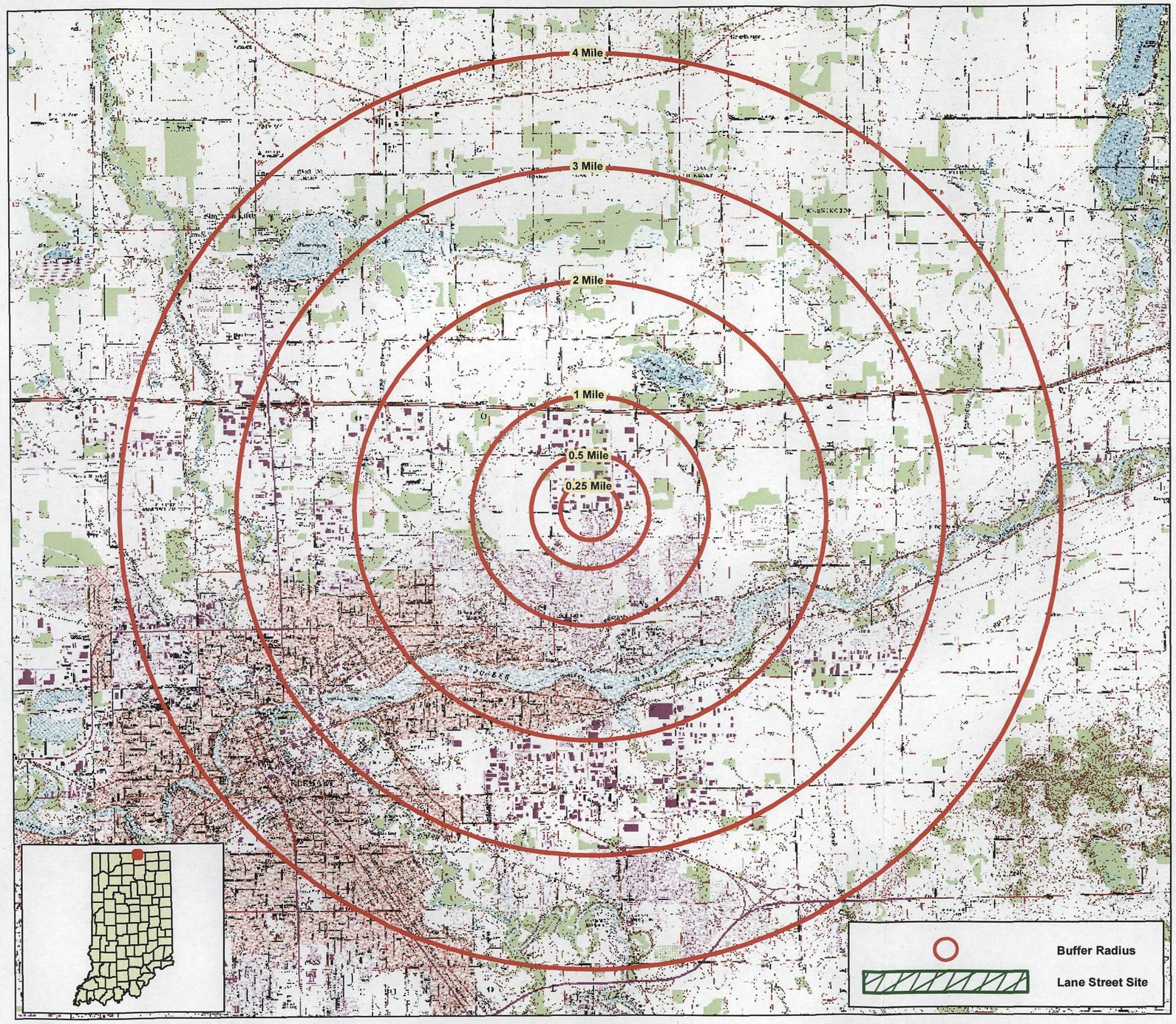
APPENDIX B

Fifteen Mile Surface Water Pathway Map



Lane Street Ground Water Contamination
Elkhart, Elkhart County, IN
US EPA ID: INN 000510229

85°55'15.33"W 41°43'0.64"N
(Lane Street and CR 106)

Buffer Distance	Adjusted Population
0.25 Mile	249
0.5 Mile	698
1 Mile	2656
2 Mile	10536
3 Mile	14584
4 Mile	23418

Mapped by: Diane Osbom, IDEM, Office of Land Quality, Engineering & GIS Services, September 15, 2008

Sources:
IDEM 4 Mile Mapper Application
USGS Digital Raster Graphics 1:24,000 topographic map
Census block group 2000 total population
Census 2000 County Boundaries
Census 2000 City Boundaries

Disclaimer: This map graphically depicts locations and is generated for the Lane Street Ground Water Contamination Site Inspection report. There are known sources of error in the population estimates presented on this map including:
- The Census 2000 block group population data is out of date, and is itself an imperfect estimate of population.
- The adjusted population estimate derived from the Census 2000 block group data assumes that the population is evenly distributed in each block group polygon.
- The Census 2000 block group population has been clipped to include Indiana data only.

Method of Estimating Population: The adjusted population estimate is the sum of Census 2000 block group populations (TOTALPOP field) adjusted to include only the areas of the block groups contained inside the buffers. The adjusted population estimate assumes that the population is evenly distributed in each block group polygon. The specific procedure used in this analysis is as follows:

1. The study area or site is drawn on screen by the user. The study area can be 1 or more polygons.
2. The user selects the polygon(s) to include in the population estimate, and clicks a button to perform the rest of the analysis which is described in the following steps.
3. The study area polygon(s) are buffered at .0001, ¼, ½, 1, 2, 3 and 4 miles. The buffers are stored as polygons in a shapefile. In analyses with more than one study area polygon, intersecting buffers are dissolved to prevent overlapping buffers of the same buffer distance. This is necessary to prevent counting the population more than once in areas where buffers overlap.
4. A spatial union is performed on the block group layer and the buffers layer resulting in a new layer containing polygons reflecting the combined geography of the block groups and the buffers. The new polygons inherit the attributes of the parent polygons from the block groups and buffers layers, including the population and area of the parent block group polygon. The area of the new polygons is not calculated automatically during the union.
5. The geographic area of each new polygon is determined through a field calculation using a piece of visual basic code. See ArcGIS Help for a discussion of this process including the code.
6. Following step 5, each new polygon has an attribute record containing the geographic area of the new polygon, the geographic area of the parent block group, and the TOTALPOP field population value from the parent block group. Dividing the area of the new polygon by the area of the parent block group and multiplying that value by the population yields a population estimate for each new polygon. For example: Block Group A with an area of 10 square miles and a population of 200 people is split into 2 polygons by the 4 mile buffer ring. The area of the block group inside the 4 mile buffer is 2 square miles, or 20% of the area of the original 10 square mile block group. Assuming the population is uniformly distributed in Block Group A, the population from Block Group A that is within the 4 mile buffer ring should also be 20% of the total population for the block group. Twenty percent of 200 is 40 people, (2 ÷10 × 200 = 40)
7. The new population figures from step 6 are automatically summed and compiled into a table that is displayed on the print layout. The automatic summing process completed by the 4 Mile Mapper application produces population estimates that include the entire population from the site out to each buffer distance (e.g. 0 to 0.25, 0 to .50, 0 to 1, 0 to 2...). The map author manually recalculates these figures by taking the population for each buffer distance and subtracting the population of the next smaller buffer distance to provide a population figure for the donut area bounded by each pair of consecutive buffer distances (e.g. 0 to 0.25, 0.25 to 0.5, 0.5 to 1, 1 to 2...). The population table is labeled and revised to reflect these values, and a total population figure is added to reflect the population from the site out to the 4 mile buffer distance.

This map is referenced in the IDEM Lane Street Ground Water Contamination Site Inspection Report as Appendix A-1

IDEM
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

This Map was created using 4 Mile Mapper, a customized application developed in ArcGIS v 9 in the Office of Land Quality, Applied Science Technologies Section by Mr. Raju Gopinath, Indiana Governor's Public Service Intern, Summer 2004.

0 0.5 1 2 3 4 Miles
0 1.5 3 6 KM

N W E S

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APPENDIX C

Chemical Analysis

State Form 4336

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
INDIANAPOLIS

OFFICE MEMORANDUM

Date: July 11, 2008

To: Mark Jaworski
Site Investigation Section

Thru: Steve Buckel, Chief 7-16-08
Chemistry Services Section

From: Craig Barker CB 7-16-08
Environmental Chemist 1
Chemistry Services Section

Subject: Analytical Results
Lane Street
Elkhart, Elkhart County
7300081
QA/QC Summary

The analytical results for the Lane Street samples in Elkhart have been validated according to the quality criteria contained in CLP SOW SOM102. Based on the evaluation, it has been determined that the results are partially acceptable for use. Memoranda are included for each sample delivery group. The laboratory grouped sample sets as they were delivered to the lab.

General Comments:

The purpose of this event was to sample for ground water contamination. The collected samples were analyzed for volatile organic compounds (VOCs). A full Quality Assurance/Quality Control (QA/QC) package was not included with these results. Only surrogate recoveries, Matrix Spike/Matrix Spike Duplicate (MS/MSD), and internal standard areas were included. A third party data validation report was included in each set and references are made to the reports in the memos.

Sampling Quality Assurance/Quality Control:

Field documentation allowed for interpretation of the data. Completed field sheets were include with the analytical results. Several ground water samples were collected with a peristaltic pump. The vacuum and agitation produced by peristaltic pump causes VOC results to be estimated, biased low.

Field duplicate samples are used to establish the representativeness of field sampling (i.e., the homogeneity and sample variability). Field duplicates were usually included in each sample set. Some sets did not have any and some had two sets of duplicates. Some duplicates were in control (less than 20% relative percent difference [RPD]) and some had more variation (20-50% RPD). There were a few that varied widely, possibly due to difficulty in obtaining representative samples from direct push sampling points.

Field blanks (trip and/or equipment) are used to identify sample contamination resulting from sampling equipment, sample containers, chemical preservatives, and the handling and transportation of samples. Most samples sets had trip blanks. Some sets did not have trip blanks while a few had two trip blanks. The CLP data review reports that chloroform was out of control in the initial calibration and the results for chloroform are estimated in all data packages. An equipment blank was not usually included although two sample sets did have equipment blanks. Both blanks had some trihalomethanes detected. Trihalomethanes are typically disinfection byproducts in drinking water.

Laboratory Quality Assurance/Quality Control:

The laboratory apparently performed all quality assurance/quality control (QA/QC) measures necessary to validate the analytical results for this sampling event. The data was determined to be valid. Based on the validation of the analytical results, the following comments and/or qualifications made regarding the data:

Volatile Organic Compounds

Samples were analyzed for VOCs by CLP SOW S0M01.2. According to the third party report, chloroform was out of control in the initial calibration in all data packages. Several also had vinyl chloride and 1,2,3 Trichlorobenzene out as well. Methylene chloride was detected in several of the method blanks. Samples were sometimes analyzed after a concentrated sample without a blank run between analyses. Results of those samples are estimated due to possible carryover from the concentrated sample and are noted in each memo. Matrix spike and matrix spike duplicates were usually in control. Some MS/MSDs spiked the sample that contained high TCE concentrations. In this case, accuracy could not be determined. Several compounds were detected in the samples below the quantitation limit and are estimated. Several samples had high concentrations of TCE above the calibration range. Usually these samples were diluted and reanalyzed to determine concentrations within range. The diluted analyses results should be used. However, some samples were not reanalyzed and TCE concentrations remain estimated.

Results:

Elevated concentrations of several chlorinated VOCs, mostly TCE, were detected in several samples.

Conclusions:

The data are usable with qualifications for the overall project goal. Further investigation is recommended.

State Form 4336

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
INDIANAPOLIS

OFFICE MEMORANDUM

Date: July 11, 2008

To: Mark Jaworski
Site Investigation Section

Thru: Steve Buckel, Chief 7-16-08
Chemistry Services Section

From: Craig Barker CB 7-16-08
Environmental Chemist 1
Chemistry Services Section

Subject: Analytical Results
Lane Street
Elkhart, Elkhart County
7300081
Sampler Delivery Group E2PP2
Sample Numbers: E2PP2, E2PP8, E2PP9, E2PQ1, E2PT6-E2PT8, E2Q01, E2Q40-E2Q42, E2Q46, E2Q60-E2Q65, E2Q98, E2Q99

The analytical results for the samples identified above have been validated according to the quality criteria contained in CLP SOW SOM102. Based on the evaluation, it has been determined that the results are partially acceptable for use. Reasons that data are qualified as estimated or unusable are explained below.

General Comments:

The purpose of this event was to sample for ground water contamination. The collected samples were analyzed for volatile organic compounds (VOCs). A full Quality Assurance/Quality Control (QA/QC) package was not included with these results. Only surrogate recoveries, Matrix Spike/Matrix Spike Duplicate (MS/MSD), and internal standard areas were included. A third party data validation report was included and references will be made to that report in this memo.

Sampling Quality Assurance/Quality Control:

Field documentation allowed for interpretation of the data. Completed field sheets were include with the analytical results. All ground water samples were collected with a peristaltic pump. The vacuum and agitation produced by peristaltic pump causes VOC results to be estimated, biased low.

Field duplicate samples are used to establish the representativeness of field sampling (i.e., the homogeneity and sample variability). Two sets of field duplicates were collected in this sample set. Duplicates E2Q46 and E2Q42 were in good agreement in the diluted analyses. Duplicates E2Q65 and E2Q64 were not in agreement. The diluted analyses for this set had a relative percent difference of 44%, slightly high.

Field blanks (trip and/or equipment) are used to identify sample contamination resulting from sampling equipment, sample containers, chemical preservatives, and the handling and transportation of samples. The trip blank, E2Q98, had chloroform detected in the sample. The CLP data review reports that chloroform was out of control in the initial calibration and the results for chloroform are estimated. An equipment blank was not necessary since collection devices were dedicated or disposable.

Laboratory Quality Assurance/Quality Control:

The laboratory apparently performed all quality assurance/quality control (QA/QC) measures necessary to validate the analytical results for this sampling event. The data was determined to be valid. Based on the validation of the analytical results, the following comments and/or qualifications made regarding the data:

Volatile Organic Compounds

Samples were analyzed for VOCs by CLP SOW S0M01.2. According to the third party report, chloroform and vinyl chloride were out of control in the initial calibration. All non-detect sample results are estimated. Methylene chloride was detected in the method blank. All detections of methylene chloride less than 4 times the amount in the blank are estimated. Samples E2PP8 and E2Q01 were analyzed after a concentrated sample without a blank run between analyses. Results of those samples are estimated due to possible carryover from the concentrated sample. Trichloroethene (TCE) recovery was low in the matrix spike duplicate (MSD). However, the concentration in the MSD was above the calibration range. The effects are minimal. Several compounds were detected in the samples below the quantitation limit and are estimated. Several samples had high concentrations of TCE above the calibration range. These samples were diluted and reanalyzed to determine concentrations within range. The diluted analyses results should be used. These include E2PP2, E2PP8, E2Q1, E2Q95, E2Q40-E2Q42, and E2Q64-E266. Only E2PP8 had a major reduction in concentration from the undiluted to the dilute analyses.

Results:

Elevated concentrations of several chlorinated VOCs were detected in several samples.

Conclusions:

The data are usable with qualifications for the overall project goal. Further investigation is recommended.

State Form 4336

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
INDIANAPOLIS

OFFICE MEMORANDUM

Date: July 14, 2008

To: Mark Jaworski
Site Investigation Section

Thru: Steve Buckel, Chief 7-16-08
Chemistry Services Section

From: Craig Barker CB 7-16-08
Environmental Chemist 1
Chemistry Services Section

Subject: Analytical Results
Lane Street
Elkhart, Elkhart County
7300081
Sampler Delivery Group E2PP3
Sample Numbers: E2PP3, E29R3-E2PR6, E2RS3-E2PS9, E2Q13, E2Q14, E2Q66, E2Q95-E2Q97

The analytical results for the samples identified above have been validated according to the quality criteria contained in CLP SOW SOM102. Based on the evaluation, it has been determined that the results are partially acceptable for use. Reasons that data are qualified as estimated or unusable are explained below.

General Comments:

The purpose of this event was to sample for ground water contamination. The collected samples were analyzed for volatile organic compounds (VOCs). A full Quality Assurance/Quality Control (QA/QC) package was not included with these results. Only surrogate recoveries, Matrix Spike/Matrix Spike Duplicate (MS/MSD), and internal standard areas were included. A third party data validation report was included and references will be made to that report in this memo.

Sampling Quality Assurance/Quality Control:

Field documentation allowed for interpretation of the data. Completed field sheets were include with the analytical results. Samples E2Q66 and E2Q95 were collected with a peristaltic pump. The vacuum and agitation produced by peristaltic pump causes VOC results to be estimated, biased low.

Field duplicate samples are used to establish the representativeness of field sampling (i.e., the homogeneity and sample variability). Duplicates E2PS6 and E2PS7 were in good agreement for all detected compounds.

Field blanks (trip and/or equipment) are used to identify sample contamination resulting from sampling equipment, sample containers, chemical preservatives, and the handling and transportation of samples. Two sets of trip blanks were in this samples set. The trip blanks, E2PP3 and E2Q97, had chloroform detected in the sample. The CLP data review reports that chloroform was out of control in the initial calibration and the results for chloroform are estimated. An equipment blank was not necessary since collection devices were dedicated or disposable.

Laboratory Quality Assurance/Quality Control:

The laboratory apparently performed all quality assurance/quality control (QA/QC) measures necessary to validate the analytical results for this sampling event. The data was determined to be valid. Based on the validation of the analytical results, the following comments and/or qualifications made regarding the data:

Volatile Organic Compounds

Samples were analyzed for VOCs by CLP SOW S0M01.2. According to the third party report, chloroform was out of control in the initial calibration. All non-detect sample results are estimated. Methylene chloride was detected in the method blank. All detections of methylene chloride less than 4 times the amount in the blank are estimated. Sample E2PS6 was analyzed after a concentrated sample without a blank run between analyses. Results of those samples are estimated due to possible carryover from the concentrated sample. Matrix spike and matrix spike duplicates were in control. Several compounds were detected in the samples below the quantitation limit and are estimated.

Results:

Elevated concentrations of several chlorinated VOCs were detected in several samples.

Conclusions:

The data are usable with qualifications for the overall project goal. Further investigation is recommended.

State Form 4336

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
INDIANAPOLIS

OFFICE MEMORANDUM

Date: July 10, 2008

To: Mark Jaworski
Site Investigation Section

Thru: Steve Buckel, Chief 7-16-08
Chemistry Services Section

From: Craig Barker CB 7-16-08
Environmental Chemist 1
Chemistry Services Section

Subject: Analytical Results
Lane Street
Elkhart, Elkhart County
7300081
Sampler Delivery Group E2PP4
Sample Numbers: E2PP4-E2PP7, E2PQ0, E2PR7-E2PR9, E2PS0-E2PS2, E2PT0-E2PT2, E2PX3-E2PX5, E2Q04-E2Q06

The analytical results for the samples identified above have been validated according to the quality criteria contained in CLP SOW SOM102. Based on the evaluation, it has been determined that the results are partially acceptable for use. Reasons that data are qualified as estimated or unusable are explained below.

General Comments:

The purpose of this event was to sample for ground water contamination. The collected samples were analyzed for volatile organic compounds (VOCs). A full Quality Assurance/Quality Control (QA/QC) package was not included with these results. Only surrogate recoveries, Matrix Spike/Matrix Spike Duplicate (MS/MSD), and internal standard areas were included. A third party data validation report was included and references will be made to that report in this memo.

Sampling Quality Assurance/Quality Control:

Field documentation allowed for interpretation of the data. Completed field sheets were include with the analytical results. Ground water samples E2PX3-E2PX5 were collected with a peristaltic pump. The vacuum and agitation produced by peristaltic pump causes VOC results to be estimated, biased low.

Field duplicate samples are used to establish the representativeness of field sampling (i.e., the homogeneity and sample variability). Field duplicates were collected from E2PR7. The aqueous duplicate samples for this study were in good agreement for the undiluted samples. The original sample results for cis-1,2-Dichlorethene were above the calibration range. However, the sample was not reanalyzed. The duplicate sample, E2PR8, had similar results for that compound in the

undiluted analysis. This sample was reanalyzed with the results in range. The undiluted results for cis-1,2-Dichloroethene are estimated and it can not be determined if the duplicates are in control. All other compounds detected within range in the original analyses are in control.

Field blanks (trip and/or equipment) are used to identify sample contamination resulting from sampling equipment, sample containers, chemical preservatives, and the handling and transportation of samples. The trip blank, E2PP4, had chloroform detected in the sample. The CLP data review reports that chloroform was out of control in the initial calibration and the results for chloroform are estimated. An equipment blank was not necessary since collection devices were dedicated or disposable.

Laboratory Quality Assurance/Quality Control:

The laboratory apparently performed all quality assurance/quality control (QA/QC) measures necessary to validate the analytical results for this sampling event. The data was determined to be valid. Based on the validation of the analytical results, the following comments and/or qualifications made regarding the data:

Volatile Organic Compounds

Samples were analyzed for VOCs by CLP SOW S0M01.2. According to the third party report, chloroform was out of control in the initial calibration. All non-detect sample results are estimated. Also 1,2,3 Trichlorobenzene and 1,2,4 Trichlorobenze were out of control in the continuing calibration. All non-detect results are estimated. Trichloroethene (TCE) was not detected in the matrix spike duplicate (MSD) sample (E2PP7). The third party report calls the non detect in that sample unusable. However, chromatograms were included with a peak at the same retention time as TCE in the MSD. Presuming the peak is TCE, the MS/MSD is in control. One of thirteen surrogates was out of control in the matrix spike analysis. The MSD surrogate was in control. The effects are minimal. Several compounds were detected in the samples below the quantitation limit and are estimated. Sample E2PR7 had cis-1,2- Dichloroethene detected above the calibration range. The sample was not reanalyzed and the results are estimated.

Results:

Elevated concentrations of several chlorinated VOCs were detected in several samples.

Conclusions:

The data are usable with qualifications for the overall project goal. Further investigation is recommended.

State Form 4336

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
INDIANAPOLIS

OFFICE MEMORANDUM

Date: July 14, 2008

To: Mark Jaworski
Site Investigation Section

Thru: Steve Buckel, Chief 7/16/08
Chemistry Services Section

From: Craig Barker CB 7-16-08
Environmental Chemist 1
Chemistry Services Section

Subject: Analytical Results
Lane Street
Elkhart, Elkhart County
7300081
Sampler Delivery Group E2PQ2
Sample Numbers: E2PQ2, E2PQ9, E2PR0-E2PR2, E2PY2, E2PZ3-E2PZ5, E2Q21-E2Q29, E2Q36

The analytical results for the samples identified above have been validated according to the quality criteria contained in CLP SOW SOM102. Based on the evaluation, it has been determined that the results are partially acceptable for use. Reasons that data are qualified as estimated or unusable are explained below.

General Comments:

The purpose of this event was to sample for ground water contamination. The collected samples were analyzed for volatile organic compounds (VOCs). A full Quality Assurance/Quality Control (QA/QC) package was not included with these results. Only surrogate recoveries, Matrix Spike/Matrix Spike Duplicate (MS/MSD), and internal standard areas were included. A third party data validation report was included and references will be made to that report in this memo.

Sampling Quality Assurance/Quality Control:

Field documentation allowed for interpretation of the data. Completed field sheets were include with the analytical results. Samples E2Q66 and E2Q95 were collected with a peristaltic pump. The vacuum and agitation produced by peristaltic pump causes VOC results to be estimated, biased low.

Field duplicate samples are used to establish the representativeness of field sampling (i.e., the homogeneity and sample variability). Two sets of field duplicates were included in this samples set. E2PQ2 and E2PR0 were not in good agreement for Trichloroethene (TCE) in the diluted samples. E2PZ4 and E2PZ5 were in good agreement forTCE.

Field blanks (trip and/or equipment) are used to identify sample contamination resulting from sampling equipment, sample containers, chemical preservatives, and the handling and transportation of samples. The trip blank, E2Q36 had chloroform detected in the sample. The CLP data review reports that chloroform was out of control in the initial calibration and the results for chloroform are estimated. An equipment blank, E2Q27 was collected and had Bromodichloromethane and Dibromochloromethane detected.

Laboratory Quality Assurance/Quality Control:

The laboratory apparently performed all quality assurance/quality control (QA/QC) measures necessary to validate the analytical results for this sampling event. The data was determined to be valid. Based on the validation of the analytical results, the following comments and/or qualifications made regarding the data:

Volatile Organic Compounds

Samples were analyzed for VOCs by CLP SOW S0M01.2. According to the third party report, chloroform, vinyl chloride, and 1,2,3 Trichlorobenzene were out of control in the initial calibration. All non-detect sample results are estimated. Methylene chloride was detected in the method blank. All detections of methylene chloride less than 4 times the amount in the blank are estimated. Sample E2PR2, E2PZ5, and E2Q5 were analyzed after a concentrated sample without a blank run between analyses. Results of those samples are estimated due to possible carryover from the concentrated sample. Matrix spike and matrix spike duplicates were in control. Several compounds were detected in the samples below the quantitation limit and are estimated.

Results:

Elevated concentrations of several chlorinated VOCs were detected in several samples.

Conclusions:

The data are usable with qualifications for the overall project goal. Further investigation is recommended.

State Form 4336

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
INDIANAPOLIS

OFFICE MEMORANDUM

Date: July 10, 2008

To: Mark Jaworski
Site Investigation Section

Thru: Steve Buckel, Chief 7/16/08
Chemistry Services Section

From: Craig Barker CB 7-16-08
Environmental Chemist 1
Chemistry Services Section

Subject: Analytical Results
Lane Street
Elkhart, Elkhart County
7300081
Sampler Delivery Group E2PQ3
Sample Numbers: E2PQ3, E2PQ6, E2PX6-E2PX9, E2Q07-E2Q12, E2Q15-E2Q20, E2PQ30, E2PQ31

The analytical results for the samples identified above have been validated according to the quality criteria contained in CLP SOW SOM102. Based on the evaluation, it has been determined that the results are partially acceptable for use. Reasons that data are qualified as estimated or unusable are explained below.

General Comments:

The purpose of this event was to sample for ground water contamination. The collected samples were analyzed for volatile organic compounds (VOCs). A full Quality Assurance/Quality Control (QA/QC) package was not included with these results. Only surrogate recoveries, Matrix Spike/Matrix Spike Duplicate (MS/MSD), and internal standard areas were included. A third party data validation report was included and references will be made to that report in this memo.

Sampling Quality Assurance/Quality Control:

Field documentation allowed for interpretation of the data. Completed field sheets were include with the analytical results. Ground water samples E2PX6-E2PX8, E2Q0-E2Q12, E2Q30 AND E2Q31 were collected with a peristaltic pump. The vacuum and agitation produced by peristaltic pump causes VOC results to be estimated, biased low.

Field duplicate samples are used to establish the representativeness of field sampling (i.e., the homogeneity and sample variability). Field duplicates were not identified in this sample set. An estimate of field precision can not be made.

Field blanks (trip and/or equipment) are used to identify sample contamination resulting from sampling equipment, sample containers, chemical preservatives, and the handling and transportation of samples. The trip blank, E2PQ6, had methylene chloride detected in the sample. The CLP data review reports that the common laboratory contaminant was detected in several samples at concentrations less that 4 times the trip blank sample. It can not be determined if methylene chloride is actually in the samples. An equipment blank was not necessary since collection devices were dedicated or disposable.

Laboratory Quality Assurance/Quality Control:

The laboratory apparently performed all quality assurance/quality control (QA/QC) measures necessary to validate the analytical results for this sampling event. The data was determined to be valid. Based on the validation of the analytical results, the following comments and/or qualifications made regarding the data:

Volatile Organic Compounds

Samples were analyzed for VOCs by CLP SOW S0M01.2. According to the third party report, chloroform and 1,2,3 Trichlorobenzene were out of control in the initial calibration. Any sample results and all non-detect sample results of these compouds are estimated. Also 1,2,3 Trichlorobenzene and 1,2,4 Trichlorobenze were out of control in the continuing calibration. All non-detect results are estimated. Methylene chloride was detected in several method blanks. Detected amounts of methylene chloride less than 4 times the blank results are estimated. One of thirteen surrogates was out of control in sample E2PX8DL (diluted) and two of thirteen were out in E2Q09. The effects are minimal. All spiked compounds in the MS were out of control high and four of five compounds were out high in the MSD. All detected compounds are estimated biased high. Non detect compounds are not affected. Samples E2PX8, E2PX8DL, and E2Q09 were analyzed after a sample with high concentrations of TCE without a blank between runs. The concentrations reported in these samples may be carryover from the previous analysis. Several compounds were detected in the samples below the quantitation limit and are estimated.

Results:

Elevated concentrations of several chlorinated VOCs were detected in several samples.

Conclusions:

The data are usable with qualifications for the overall project goal. Further investigation is recommended.

State Form 4336

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
INDIANAPOLIS

OFFICE MEMORANDUM

Date: July 11, 2008

To: Mark Jaworski
Site Investigation Section

Thru: Steve Buckel, Chief 7-16-08
Chemistry Services Section

From: Craig Barker CB 7-16-08
Environmental Chemist 1
Chemistry Services Section

Subject: Analytical Results
Lane Street
Elkhart, Elkhart County
7300081
Sampler Delivery Group E2PQ4
Sample Numbers: E2PQ4, E2PQ5, E2PQ7, E2PQ8, E2PT3-E2PT5, E2PY0, E2PY1, E2PY3, E2PY5, E2PY6, E2PY6-E2PY9, E2Q00, E2Q32, E2Q37, E2Q38

The analytical results for the samples identified above have been validated according to the quality criteria contained in CLP SOW SOM102. Based on the evaluation, it has been determined that the results are partially acceptable for use. Reasons that data are qualified as estimated or unusable are explained below.

General Comments:

The purpose of this event was to sample for ground water contamination. The collected samples were analyzed for volatile organic compounds (VOCs). A full Quality Assurance/Quality Control (QA/QC) package was not included with these results. Only surrogate recoveries, Matrix Spike/Matrix Spike Duplicate (MS/MSD), and internal standard areas were included. A third party data validation report was included and references will be made to that report in this memo.

Sampling Quality Assurance/Quality Control:

Field documentation allowed for interpretation of the data. Completed field sheets were include with the analytical results. Ground water samples E2PY0, E2PY1, E2PY3, E2PY5, E2PY6, and E2PZ7-E2PZ9 were collected with a peristaltic pump. The vacuum and agitation produced by peristaltic pump causes VOC results to be estimated, biased low.

Field duplicate samples are used to establish the representativeness of field sampling (i.e., the homogeneity and sample variability). Field duplicates were collected from E2PT5. The aqueous duplicate samples for this study were in good agreement for the undiluted samples. The original sample results for Trichloroethene (TCE) were above the calibration range. However, the sample was not reanalyzed. The duplicate sample, E2PT4, had similar results for that compound in the

undiluted analysis. This sample was reanalyzed with the results in range. The undiluted results for TCE are estimated and it can not be determined if the duplicates are in control. All other compounds detected within range in the original analyses are in control.

Field blanks (trip and/or equipment) are used to identify sample contamination resulting from sampling equipment, sample containers, chemical preservatives, and the handling and transportation of samples. There were two trip blank in this sample set, E2PQ7 and E2Q38. Blank E2PQ7 had chloroform detected in the sample, but E2Q38 did not. The CLP data review reports that chloroform was out of control in the initial calibration and the results for chloroform are estimated. An equipment blank included in this sample set, E2Q00. The equipment blank had Bromodichloromethane detected above the quantitation limit.

Laboratory Quality Assurance/Quality Control:

The laboratory apparently performed all quality assurance/quality control (QA/QC) measures necessary to validate the analytical results for this sampling event. The data was determined to be valid. Based on the validation of the analytical results, the following comments and/or qualifications made regarding the data:

Volatile Organic Compounds

Samples were analyzed for VOCs by CLP SOW S0M01.2. According to the third party report, chloroform, vinyl chloride and 1,2,3 Trichlorobenzene were out of control in the initial calibration. All non-detect sample results are estimated. Also 1,2,3 Trichlorobenzene and 1,2,4 Trichlorobenze were out of control in the continuing calibration. All non-detect results are estimated. Three of the five compounds in the matrix spike and matrix spike duplicates were slightly high. Non-detect compounds are not affected. TCE was detected in the original sample at elevated levels, much higher than the spike level. The reported elevated TCE spike recoveries are not applicable. Several compounds were detected in the samples below the quantitation limit and are estimated. Samples E2PT5, E2PZ7, E2PZ8, and E2PZ9 had TCE detected above the calibration range. These samples were not reanalyzed. The TCE results are estimated.

Results:

Elevated concentrations of several chlorinated VOCs were detected in several samples.

Conclusions:

The data are usable with qualifications for the overall project goal. Further investigation is recommended.

State Form 4336

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
INDIANAPOLIS

OFFICE MEMORANDUM

Date: July 11, 2008

To: Mark Jaworski
Site Investigation Section

Thru: Steve Buckel, Chief 7-16-08
Chemistry Services Section

From: Craig Barker CB 7-16-08
Environmental Chemist 1
Chemistry Services Section

Subject: Analytical Results
Lane Street
Elkhart, Elkhart County
7300081
Sampler Delivery Group E2Q03
Sample Numbers: E2Q03, E2Q47-E2Q53, E2Q73, E2Q76, E2Q91

The analytical results for the samples identified above have been validated according to the quality criteria contained in CLP SOW SOM102. Based on the evaluation, it has been determined that the results are partially acceptable for use. Reasons that data are qualified as estimated or unusable are explained below.

General Comments:

The purpose of this event was to sample soil for contamination. The collected samples were analyzed for volatile organic compounds (VOCs). A full Quality Assurance/Quality Control (QA/QC) package was not included with these results. Only surrogate recoveries, Matrix Spike/Matrix Spike Duplicate (MS/MSD), and internal standard areas were included. A third party data validation report was included and references will be made to that report in this memo.

Sampling Quality Assurance/Quality Control:

Field documentation allowed for interpretation of the data. Completed field sheets were include with the analytical results.

Field duplicate samples are used to establish the representativeness of field sampling (i.e., the homogeneity and sample variability). Field duplicates were not collected in this sample set.

Field blanks (trip and/or equipment) are used to identify sample contamination resulting from sampling equipment, sample containers, chemical preservatives, and the handling and transportation of samples. A trip blank was not necessary for soil samples. An equipment blank was not included in this sample set since dedicated or disposable sample equipment was used.

Laboratory Quality Assurance/Quality Control:

The laboratory apparently performed all quality assurance/quality control (QA/QC) measures necessary to validate the analytical results for this sampling event. The data was determined to be valid. Based on the validation of the analytical results, the following comments and/or qualifications made regarding the data:

Volatile Organic Compounds

Samples were analyzed for VOCs by CLP SOW S0M01.2. According to the third party report, methylene chloride was detected in the method blank. All results less than 4 times the blank amount are estimated. The surrogate compound 1,4-Dioxane was high in some samples. The non-detect results are not affected. All matrix spikes were in control. Several compounds were detected in the samples below the quantitation limit and are estimated.

Results:

Chlorinated VOCs were not detected in the soil samples.

Conclusions:

The data are usable with qualifications for the overall project goal.

State Form 4336

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
INDIANAPOLIS

OFFICE MEMORANDUM

Date: July 11, 2008

To: Mark Jaworski
Site Investigation Section

Thru: Steve Buckel, Chief 7-16-08
Chemistry Services Section

From: Craig Barker CB 7-16-08
Environmental Chemist 1
Chemistry Services Section

Subject: Analytical Results
Lane Street
Elkhart, Elkhart County
7300081
Sampler Delivery Group E2Q72
Sample Numbers: E2Q72, E2Q74, E2Q75, E2Q77, E2Q78, E2Q83-E2Q90, E2Q92, E2Q93

The analytical results for the samples identified above have been validated according to the quality criteria contained in CLP SOW SOM102. Based on the evaluation, it has been determined that the results are partially acceptable for use. Reasons that data are qualified as estimated or unusable are explained below.

General Comments:

The purpose of this event was to sample for ground water contamination. The collected samples were analyzed for volatile organic compounds (VOCs). A full Quality Assurance/Quality Control (QA/QC) package was not included with these results. Only surrogate recoveries, Matrix Spike/Matrix Spike Duplicate (MS/MSD), and internal standard areas were included. A third party data validation report was included and references will be made to that report in this memo.

Sampling Quality Assurance/Quality Control:

Field documentation allowed for interpretation of the data. Completed field sheets were include with the analytical results. Ground water samples E2Q83-E2Q90, E2Q92 and E2Q93 were collected using a peristaltic pump. The vacuum and agitation produced by peristaltic pump causes VOC results to be estimated, biased low.

Field duplicate samples are used to establish the representativeness of field sampling (i.e., the homogeneity and sample variability). Two sets of field duplicates were collected in this samples set. One set collected from E2Q86-E2Q87 were in good agreement. The other set, E2Q88-E2Q89, were no in good agreement. Both sample results for Trichloroethene (TCE) were above the calibration range in the original samples and both were diluted. The elevated concentrations

of TCE are widely different (49 and 770 µg/L). This may reflect the ability to obtain representative samples from Geoprobe wells obtained at a depth of 18 feet.

Field blanks (trip and/or equipment) are used to identify sample contamination resulting from sampling equipment, sample containers, chemical preservatives, and the handling and transportation of samples. There were two trip blanks in this sample set, E2Q77 and E2Q78. Neither trip blank had any compounds detected above the quantitation limit. An equipment blank was not included in this sample set.

Laboratory Quality Assurance/Quality Control:

The laboratory apparently performed all quality assurance/quality control (QA/QC) measures necessary to validate the analytical results for this sampling event. The data was determined to be valid. Based on the validation of the analytical results, the following comments and/or qualifications made regarding the data:

Volatile Organic Compounds

Samples were analyzed for VOCs by CLP SOW S0M01.2. Sample E2Q75 and E2Q75DL were analyzed after the 14 day holding time. All results are estimated for this sample. According to the third party report, chloroform, and vinyl chloride were out of control in the initial calibration. All non-detect sample results are estimated. Methylene chloride was detected in the method blank. All results less than 4 times the blank amount are estimated. Three of the five compounds in the matrix spike and matrix spike duplicates were slightly high. Non-detect compounds are not affected. Several compounds were detected in the samples below the quantitation limit and are estimated.

Results:

Elevated concentrations of several chlorinated VOCs were detected in several samples.

Conclusions:

The data are usable with qualifications for the overall project goal. Further investigation is recommended.

ESAT Controlled Number: ESAT5.17.00038 - pd 6 June 08

DATE: June 6, 2008

Indiana Dept of Environmental Management
ATTN: Mark Jaworski
100 N. Senate Avenue – Room N1255
Indianapolis, IN 46804-2222

SITE NAME: Lane Street Groundwater Contamination (IN)

CASE #	LAB	SAMPLES	SDG	MATRIX
37367	A4 Scientific	20	E2PP2	water

Upon receipt of data, please check each package for completeness and note any missing deliverables below.

Send this form back to Sylvia Griffin, Data Management Coordinator after filling in the blanks below.

Data Received by:_____ Date:_____

PROBLEMS:

Please indicate if data is complete, and note if there are any deliverables missing from the cases noted above.

_____

_____

Received by Data Management Coordinator, CRL for file.

Signature:_____ Date:_____

FROM: **U.S. EPA - Region 5**
Sylvia Griffin
Central Regional Laboratory
536 S. Clark, 10th Floor
Chicago, IL 60605

Sent By: Pat Davis
Data Coordinator
ESAT Region 5 **TechLaw**

Controlled Document

ESAT5.16.00017

acH
6-4-08

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V
SUPERFUND DIVISION

DATE:

SUBJECT: Review of Data
Received for Review on: May 9, 2008

FROM: Stephen L. Ostrodka, Chief (SRT-4J)
Superfund Field Services Section

Per Steve Ostrodka
Richard L Bygnit
6/3/08

TO: Data User: IDEM

We have reviewed the data for the following case:

SITE Name: Lane Street Groundwater Contamination Site (IN)

Case Number: 37367 SDG Number: E2PP2

Number and Type of Samples: 20 waters (Trace Volatiles)

Sample Numbers: E2PP2, E2PP8, E2PP9, E2PQ1, E2PT6 - E2PT8, E2Q01, E2Q40 – E2Q42, E2Q46, E2Q60 – E2Q65, E2Q98, E2Q99

Laboratory: A4 Scientific, Inc. Hrs for Review:

Following are our findings:

The data are usable and acceptable with the modifications described in the attached narrative.

Richard L Bygnit

CC: Howard Pham
Region 5 TPO
Mail Code: SRT-4J

RECEIVED
JUN 13 2008
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY

Case Number: 37367 SDG Number: E2PP2
Site Name: Lane Street Groundwater Contamination (IN) Laboratory: A4 Scientific, Inc.

Below is a summary of the out-of-control audits and the possible effects on the data for this case:

Twenty (20) preserved water samples labeled E2PP2, E2PP8, E2PP9, E2PQ1, E2PT6 through E2PT8, E2Q01, E2Q40 through E2Q42, E2Q46, E2Q60 through E2Q65, E2Q98 and E2Q99 were shipped to A4 Scientific, Inc. located in The Woodlands, TX. All samples were collected on April 16, 2008 and received on April 17, 2008 intact and properly cooled.

All samples were analyzed according to CLP SOW SOM01.2 (8/2207) and reviewed according to the NFG for SOM01.1 and the SOP for ESAT 5/TechLaw Validation of Contract Laboratory Program Organic Data (Version 2.1).

Sample E2Q61 was designated by the samplers to be used for laboratory QC, i.e. matrix spike / matrix spike duplicate analyses.

No samples were identified as field blanks or field duplicates.

Reviewed by: Allison Harvey / Techlaw-ESAT
Date: May 30, 2008

Case Number: 37367 SDG Number: E2PP2
Site Name: Lane Street Groundwater Contamination (IN) Laboratory: A4 Scientific, Inc.

1. HOLDING TIME

No problems were found.

2. *GC/MS TUNING AND GC INSTRUMENT PERFORMANCE*

No problems were found.

3. CALIBRATION

The following trace volatile samples are associated with an initial calibration with percent relative standard deviations (%RSDs) that exceeded the criteria of 30%. The detected Chloroform in sample E2PT8 is qualified "J". The non-detected compounds are qualified "UJ".

E2PP2, E2PP2DL, E2PP8, E2PQ1, E2PT8, E2Q01, E2Q01DL, E2Q40DL, E2Q41DL, E2Q42, E2Q42DL, E2Q46DL, E2Q63, E2Q64DL, VBLKJJ, VBLKJK, VBLKJL
Vinyl chloride, Chloroform

4. BLANKS

The following trace volatile sample was analyzed after a highly contaminated sample with no intervening instrument blank. Detected compounds are qualified "J" due to the possibility of carry-over.

E2PP8, E2Q01, E2Q61MSD
Trichloroethene

The following trace volatiles samples have common contaminant analyte concentrations reported less than the CRQL. The associated method blank concentration has common contaminant analyte concentration less than 2X the CRQL. Detected compounds are qualified "U". Non-detected compounds are not qualified. Reported sample concentrations have been elevated to the CRQL.

Methylene chloride
E2PP2, E2PP2DL, E2PP8, E2PQ1, E2PT7, E2PT8, E2Q01, E2Q01DL, E2Q40, E2Q40DL, E2Q41DL, E2Q42DL, E2Q46DL, E2Q61MS, E2Q62DL, E2Q63, E2Q64DL, E2Q65, E2Q65DL

The following trace volatile samples have common contaminant analyte concentrations reported less than the 4X the CRQL. The associated method blank concentration has common contaminant analyte concentration less than 2X the CRQL. Detected compounds are qualified "U". Non-detected compounds are not qualified. Sample concentrations have been reported as the adjusted CRQL.

Methylene chloride
E2Q41, E2Q42, E2Q61MSD

The following trace volatile samples have TIC concentrations reported less than 2 µg/L (adjusted for dilution). The associated method blank concentration have TIC concentrations reported less than 2 µg/L. Detected compounds are qualified "U" and deleted from the TIC report.

E2PP8DL

5. DEUTERATED MONITORING COMPOUND AND SURROGATE RECOVERY

The following trace volatile samples have DMC/SMC recoveries above the upper limit of the criteria window. Detected 1,1-Dichloroethene in samples E2Q61MS and E2Q61MSD are qualified "J". Non-detected compounds are not qualified for this criterion.

E2PP8, E2Q42
Acetone, 2-Butanone

E2PQ1
4-Methyl-2-pentanone, 2-Hexanone

E2Q61MS, E2Q61MSD
1,1-Dichloroethene, trans-1,2-Dichloroethene, cis-1,2-Dichloroethene

6A. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample E2Q61 was designated by the samplers to be used for laboratory QC, i.e. matrix spike / matrix spike duplicate analyses.

The relative percent difference (RPD) between the following trace volatile matrix spike and matrix spike duplicate recoveries is outside criteria. The detected compound in the unspiked sample, E2Q61, is qualified "J".

E2Q61MS, E2Q61MSD
Trichloroethene

The following trace volatile matrix spike/matrix spike duplicate samples have percent recovery less than the lower limit but greater than 20%. The detected compound in the unspiked sample, E2Q61, is qualified "J".

E2Q61MSD
Trichloroethene

6B. LABORATORY CONTROL SAMPLE

Not applicable for the trace volatile analyses.

7. FIELD BLANK AND FIELD DUPLICATE

No samples were identified as field blanks or field duplicates. Results are not qualified based upon the results of the field duplicates.

8. INTERNAL STANDARDS

The laboratory used the IS QC limits for low/medium level VOA (50-200% area and ±0.50 RT) instead of IS QC limits for trace VOA (60-140% area and ±0.33 RT). The IS QC limits for trace VOA were used to re-evaluate the IS recoveries for the samples in this SDG.

No problems were found.

9. COMPOUND IDENTIFICATION

After reviewing the mass spectra and chromatograms it appears that all VOA compounds were properly identified.

10. COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

The following trace volatile samples have analyte concentrations below the quantitation limit (CRQL). Detected compounds are qualified "J".

E2PP2
Benzene

E2PP8
Trans-1,2-Dichloroethene, cis-1,2-Dichloroethene, Cyclohexane, Toluene

E2PP8DL, E2Q46, E2Q61, E2Q98, VBLK87, VBLKJJ, VBLKJR
Methylene chloride

E2PP9
1,1,1-Trichloroethane, Cyclohexane, Benzene, Trichloroethene, m,p-Xylene

E2PQ1
Ethylbenzene, m,p-Xylene

E2PT6
Cyclohexane, Benzene, Methylcyclohexane, Ethylbenzene, m,p-Xylene

E2PT7
Cyclohexane, Methylcyclohexane

E2Q01
1,1-Dichloroethane, Cyclohexane, m,p-Xylene

E2Q01DL
1,1,1-Trichloroethane, Toluene

E2Q40
Cis-1,2-Dichloroethene

E2Q41, E2Q42DL, E2Q65, E2Q99
Toluene

E2Q41DL, E2Q64DL
1,1,1-Trichloroethane

E2Q42
Cyclohexane, Ethylbenzene, m,p-Xylene

E2Q62
Carbon disulfide, Cyclohexane, Benzene, Ethylbenzene, m,p-Xylene

E2Q64
Methylene chloride, Toluene

VBLKJK
Methylene chloride, Bromodichloromethane

VBLKJL
Bromodichloromethane

11. SYSTEM PERFORMANCE

GC/MS baseline indicated acceptable performance.

12. ADDITIONAL INFORMATION

The following trace volatiles samples have analyte concentrations which exceed the instruments calibration range. The detected results are qualified "J". The results from the diluted analyses should be considered the final concentrations for the affected analytes.

E2PP2, E2PP8, E2Q01, E2Q40, E2Q41, E2Q42, E2Q46, E2Q62, E2Q64, E2Q65
Trichloroethene

Case Number: 37367 SDG Number: E2PP2
Site Name: Lane Street Groundwater Contamination (IN) Laboratory: A4 Scientific, Inc.

The following trace volatile samples have analyte concentrations which exceed the instruments calibration range. The detected results are qualified "J". No dilution was required because these are laboratory QC samples.

E2Q61MS, E2Q61MSD
Trichloroethene

Reviewed by: Allison Harvey / Techlaw-ESAT
Date: May 30, 2008

Case Number: 37367 SDG Number: E2PP2

Site Name: Lane Street Groundwater Contamination (IN) Laboratory: A4 Scientific, Inc.

CADRE Data Qualifier Sheet

Qualifiers	Data Qualifier Definitions
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the action limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
NJ	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification and the associated numerical value represents its approximate concentration.
R	The data are unusable. (The compound may or may not be present.)

Reviewed by: Allison Harvey / Techlaw-ESAT

Date: May 30, 2008

Case #: 37367 SDG : E2PP2
Site : LANE STREET GROUND WATER CONTAMINATION Number of Soil Samples : 0
Lab. : A4 Number of Water Samples : 20
wer : Number of Sediment Samples : 0
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Sample Number :	E2PP2		E2PP2DL		E2PP8		E2PP8DL		E2PP9	
Sampling Location :	GW106		GW106		GW107		GW107		GW97	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	4/16/2008				4/16/2008				4/16/2008	
Time Sampled :										
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :	2.0		2.0		2.0		2.0		2.0	
Dilution Factor :	1.0		25.0		1.0		2.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.50	U	13	U	0.50	U	1.0	U	0.50	U
Chloromethane	0.50	U	13	U	0.50	U	1.0	U	0.50	U
Vinyl chloride	0.50	UJ	13	UJ	0.50	UJ	1.0	U	0.50	U
Bromomethane	0.50	U	13	U	0.50	U	1.0	U	0.50	U
Chloroethane	0.50	U	13	U	0.50	U	1.0	U	0.50	U
Trichlorofluoromethane	0.50	U	13	U	0.50	U	1.0	U	0.50	U
1,1-Dichloroethene	0.50	U	13	U	0.50	U	1.0	U	0.50	U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	13	U	0.50	U	1.0	U	0.50	U
Acetone	5.0	U	130	U	5.0	U	10	U	5.0	U
Carbon Disulfide	0.50	U	13	U	0.50	U	1.0	U	0.86	
Methyl acetate	0.50	U	13	U	0.50	U	1.0	U	0.50	U
Methylene chloride	0.50	U	13	U	0.50	U	0.51	J	0.50	U
trans-1,2-Dichloroethene	0.50	U	13	U	0.087	J	1.0	U	0.50	U
yl tert-butyl ether	0.50	U	13	U	0.50	U	1.0	U	0.50	U
Dichloroethane	0.92		13	U	3.7		1.0	U	0.50	U
cis-1,2-Dichloroethene	0.50	U	13	U	0.32	J	1.0	U	0.50	U
2-Butanone	5.0	U	130	U	5.0	U	10	U	5.0	U
Bromochloromethane	0.50	U	13	U	0.50	U	1.0	U	0.50	U
Chloroform	0.50	UJ	13	UJ	0.50	UJ	1.0	U	0.50	U
1,1,1-Trichloroethane	14		17		0.63		1.0	U	0.25	J
Cyclohexane	0.50	U	13	U	0.15	J	1.0	U	0.28	J
Carbon tetrachloride	0.50	U	13	U	0.50	U	1.0	U	0.50	U
Benzene	0.42	J	13	U	0.50	U	1.0	U	0.47	J
1,2-Dichloroethane	0.50	U	13	U	0.50	U	1.0	U	0.50	U
Trichloroethene	300	J	420		190	J	4.6		0.38	J
Methylcyclohexane	0.79		13	U	0.50	U	1.0	U	0.50	U
1,2-Dichloropropane	0.50	U	13	U	0.50	U	1.0	U	0.50	U
Bromodichloromethane	0.50	U	13	U	0.50	U	1.0	U	0.50	U
cis-1,3-Dichloropropene	0.50	U	13	U	0.50	U	1.0	U	0.50	U
4-Methyl-2-pentanone	5.0	U	130	U	5.0	U	10	U	5.0	U
Toluene	0.75		13	U	0.38	J	1.0	U	0.93	
trans-1,3-Dichloropropene	0.50	U	13	U	0.50	U	1.0	U	0.50	U
1,1,2-Trichloroethane	0.50	U	13	U	0.50	U	1.0	U	0.50	U

Case #: 37367 SDG : E2PP2
Site : LANE STREET GROUND WATER CONTAMINATION
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Sample Number :	E2PP2		E2PP2DL		E2PP8		E2PP8DL		E2PP9	
Sampling Location :	GW106		GW106		GW107		GW107		GW97	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	4/16/2008				4/16/2008				4/16/2008	
Time Sampled :										
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :	2.0		2.0		2.0		2.0		2.0	
Dilution Factor :	1.0		25.0		1.0		2.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.50	U	13	U	0.50	U	1.0	U	0.50	U
2-Hexanone	5.0	U	130	U	5.0	U	10	U	5.0	U
Dibromochloromethane	0.50	U	13	U	0.50	U	1.0	U	0.50	U
1,2-Dibromoethane	0.50	U	13	U	0.50	U	1.0	U	0.50	U
Chlorobenzene	0.50	U	13	U	0.50	U	1.0	U	0.50	U
Ethylbenzene	0.50	U	13	U	0.50	U	1.0	U	0.50	U
o-Xylene	0.50	U	13	U	0.50	U	1.0	U	0.50	U
m,p-Xylene	0.50	U	13	U	0.50	U	1.0	U	0.39	J
Styrene	0.50	U	13	U	0.50	U	1.0	U	0.50	U
Bromoform	0.50	U	13	U	0.50	U	1.0	U	0.50	U
Isopropylbenzene	0.50	U	13	U	0.50	U	1.0	U	0.50	U
1,1,2,2-Tetrachloroethane	0.50	U	13	U	0.50	U	1.0	U	0.50	U
1,2-Dichlorobenzene	0.50	U	13	U	0.50	U	1.0	U	0.50	U
ichlorobenzene	0.50	U	13	U	0.50	U	1.0	U	0.50	U
,4-Dichlorobenzene	0.50	U	13	U	0.50	U	1.0	U	0.50	U
1,2-Dibromo-3-chloropropane	0.50	U	13	U	0.50	U	1.0	U	0.50	U
1,2,4-Trichlorobenzene	0.50	U	13	U	0.50	U	1.0	U	0.50	U
1,2,3-Trichlorobenzene	0.50	U	13	U	0.50	U	1.0	U	0.50	U

Case #: 37367 SDG : E2PP2
Site : LANE STREET GROUND WATER CONTAMINATION
Lab : A4
Reviewer :
Date :

Sample Number	E2PQ1		E2PT6		E2PT7		E2PT8		E2Q01	
Sampling Location :	GW98		GW94		GW95		GW96		GW104	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	4/16/2008		4/16/2008		4/16/2008		4/16/2008		4/16/2008	
Time Sampled :										
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :	2.0		2.0		2.0		2.0		2.0	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Vinyl chloride	0.50	UJ	0.50	U	0.50	U	0.50	UJ	0.50	UJ
Bromomethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Trichlorofluoromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Acetone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Carbon Disulfide	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methyl acetate	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methylene chloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
trans-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methyl tert-butyl ether	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.34	J
cis-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
2-Butanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Bromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroform	0.50	UJ	0.50	U	0.84		5.0	J	0.50	UJ
1,1,1-Trichloroethane	1.6		0.50	U	1.7		0.50	U	2.4	
Cyclohexane	0.50	U	0.37	J	0.40	J	0.50	U	0.36	J
Carbon tetrachloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Benzene	0.50	U	0.41	J	0.53		2.0		0.52	
1,2-Dichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Trichloroethene	1.6		0.81		4.7		0.50	U	76	J
Methylcyclohexane	0.50	U	0.41	J	0.39	J	0.50	U	0.50	U
1,2-Dichloropropane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromodichloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
cis-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
4-Methyl-2-pentanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Toluene	0.50		0.81		0.85		2.0		0.84	
trans-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U

Case # 37367 SDG : E2PP2
Site : LANE STREET GROUND WATER CONTAMINATION
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Sample Number :	E2PQ1		E2PT6		E2PT7		E2PT8		E2Q01	
Sampling Location :	GW98		GW94		GW95		GW96		GW104	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	4/16/2008		4/16/2008		4/16/2008		4/16/2008		4/16/2008	
Time Sampled :										
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :	2.0		2.0		2.0		2.0		2.0	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
2-Hexanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Dibromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromoethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Ethylbenzene	0.13	J	0.26	J	0.50	U	0.50	U	0.50	U
o-Xylene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
m,p-Xylene	0.19	J	0.39	J	0.50	U	0.50	U	0.28	J
Styrene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromoform	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Isopropylbenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2,2-Tetrachloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
,3-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
ichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
,2-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromo-3-chloropropane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2,4-Trichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2,3-Trichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U

Case #: 37367 SDG : E2PP2
Site : LANE STREET GROUND WATER CONTAMINATION
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Date :

Sample Number :	E2Q01DL		E2Q40		E2Q40DL		E2Q41		E2Q41DL	
Sampling Location :	GW104		GW114		GW114		GW115		GW115	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :			4/16/2008				4/16/2008			
Time Sampled :										
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :	2.0		2.0		2.0		2.0		2.0	
Dilution Factor :	10.0		1.0		10.0		1.0		25.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	5.0	U	0.50	U	5.0	U	0.50	U	13	U
Chloromethane	5.0	U	0.50	U	5.0	U	0.50	U	13	U
Vinyl chloride	5.0	UJ	0.50	U	5.0	UJ	0.50	U	13	UJ
Bromomethane	5.0	U	0.50	U	5.0	U	0.50	U	13	U
Chloroethane	5.0	U	0.50	U	5.0	U	0.50	U	13	U
Trichlorofluoromethane	5.0	U	0.50	U	5.0	U	0.50	U	13	U
1,1-Dichloroethene	5.0	U	0.50	U	5.0	U	0.50	U	13	U
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	0.50	U	5.0	U	0.50	U	13	U
Acetone	50	U	5.0	U	50	U	5.0	U	130	U
Carbon Disulfide	5.0	U	0.50	U	5.0	U	0.50	U	13	U
Methyl acetate	5.0	U	0.50	U	5.0	U	0.50	U	13	U
Methylene chloride	5.0	U	0.50	U	5.0	U	0.51	U	13	U
trans-1,2-Dichloroethene	5.0	U	0.56		5.0	U	0.50	U	13	U
Methyl tert-butyl ether	5.0	U	0.50	U	5.0	U	0.50	U	13	U
1,1-Dichloroethane	5.0	U	0.50	U	5.0	U	0.50	U	13	U
cis-1,2-Dichloroethene	5.0	U	0.42	J	5.0	U	0.50	U	13	U
2-Butanone	50	U	5.0	U	50	U	5.0	U	130	U
Bromochloromethane	5.0	U	0.50	U	5.0	U	0.50	U	13	U
Chloroform	5.0	UJ	0.50	U	5.0	UJ	0.50	U	13	UJ
1,1,1-Trichloroethane	2.4	J	0.50	U	5.0	U	4.5		6.8	J
Cyclohexane	5.0	U	0.50	U	5.0	U	0.50	U	13	U
Carbon tetrachloride	5.0	U	0.50	U	5.0	U	0.50	U	13	U
Benzene	5.0	U	0.50	U	5.0	U	0.50	U	13	U
1,2-Dichloroethane	5.0	U	0.50	U	5.0	U	0.50	U	13	U
Trichloroethene	84		75	J	70		240	J	410	
Methylcyclohexane	5.0	U	0.50	U	5.0	U	0.50	U	13	U
1,2-Dichloropropane	5.0	U	0.50	U	5.0	U	0.50	U	13	U
Bromodichloromethane	5.0	U	0.50	U	5.0	U	0.50	U	13	U
cis-1,3-Dichloropropene	5.0	U	0.50	U	5.0	U	0.50	U	13	U
4-Methyl-2-pentanone	50	U	5.0	U	50	U	5.0	U	130	U
Toluene	0.97	J	0.50	U	5.0	U	0.44	J	13	U
trans-1,3-Dichloropropene	5.0	U	0.50	U	5.0	U	0.50	U	13	U
1,1,2-Trichloroethane	5.0	U	0.50	U	5.0	U	0.50	U	13	U

Case #: 37367 SDG : E2PP2
Site : LANE STREET GROUND WATER CONTAMINATION
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Sample Number :	E2Q01DL		E2Q40		E2Q40DL		E2Q41		E2Q41DL	
Sampling Location :	GW104		GW114		GW114		GW115		GW115	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :			4/16/2008				4/16/2008			
Time Sampled :										
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :	2.0		2.0		2.0		2.0		2.0	
Dilution Factor :	10.0		1.0		10.0		1.0		25.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	5.0	U	0.50	U	5.0	U	0.50	U	13	U
2-Hexanone	50	U	5.0	U	50	U	5.0	U	130	U
Dibromochloromethane	5.0	U	0.50	U	5.0	U	0.50	U	13	U
1,2-Dibromoethane	5.0	U	0.50	U	5.0	U	0.50	U	13	U
Chlorobenzene	5.0	U	0.50	U	5.0	U	0.50	U	13	U
Ethylbenzene	5.0	U	0.50	U	5.0	U	0.50	U	13	U
o-Xylene	5.0	U	0.50	U	5.0	U	0.50	U	13	U
m,p-Xylene	5.0	U	0.50	U	5.0	U	0.50	U	13	U
Styrene	5.0	U	0.50	U	5.0	U	0.50	U	13	U
Bromoform	5.0	U	0.50	U	5.0	U	0.50	U	13	U
Isopropylbenzene	5.0	U	0.50	U	5.0	U	0.50	U	13	U
1,1,2,2-Tetrachloroethane	5.0	U	0.50	U	5.0	U	0.50	U	13	U
Dichlorobenzene	5.0	U	0.50	U	5.0	U	0.50	U	13	U
Dichlorobenzene	5.0	U	0.50	U	5.0	U	0.50	U	13	U
2-Dichlorobenzene	5.0	U	0.50	U	5.0	U	0.50	U	13	U
1,2-Dibromo-3-chloropropane	5.0	U	0.50	U	5.0	U	0.50	U	13	U
1,2,4-Trichlorobenzene	5.0	U	0.50	U	5.0	U	0.50	U	13	U
1,2,3-Trichlorobenzene	5.0	U	0.50	U	5.0	U	0.50	U	13	U

Case #: 37367 SDG : E2PP2
Site : LANE STREET GROUND WATER CONTAMINATION
[illegible] : A4
[illegible]wer :
[illegible]te :

Sample Number :	E2Q42		E2Q42DL		E2Q46		E2Q46DL		E2Q60	
Sampling Location :	GW116		GW116		GW117		GW117		GW100	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	4/16/2008				4/16/2008				4/16/2008	
Time Sampled :										
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :	2.0		2.0		2.0		2.0		2.0	
Dilution Factor :	1.0		10.0		1.0		10.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
Chloromethane	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
Vinyl chloride	0.50	UJ	5.0	UJ	0.50	U	5.0	UJ	0.50	U
Bromomethane	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
Chloroethane	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
Trichlorofluoromethane	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
1,1-Dichloroethene	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
Acetone	5.0	U	50	U	5.0	U	50	U	5.0	U
Carbon Disulfide	0.70		5.0	U	0.50	U	5.0	U	0.50	U
Methyl acetate	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
Methylene chloride	0.54	U	5.0	U	0.27	J	5.0	U	0.50	U
[illegible]s-1,2-Dichloroethene	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
[illegible]yl tert-butyl ether	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
[illegible]-Dichloroethane	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
cis-1,2-Dichloroethene	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
2-Butanone	5.0	U	50	U	5.0	U	50	U	5.0	U
Bromochloromethane	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
Chloroform	0.50	UJ	5.0	UJ	0.50	U	5.0	UJ	0.50	U
1,1,1-Trichloroethane	1.8		5.0	U	1.8		5.0	U	0.50	U
Cyclohexane	0.48	J	5.0	U	0.50	U	5.0	U	0.50	U
Carbon tetrachloride	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
Benzene	0.73		5.0	U	0.50	U	5.0	U	0.50	U
1,2-Dichloroethane	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
Trichloroethene	62	J	55		43	J	47		0.50	U
Methylcyclohexane	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
1,2-Dichloropropane	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
Bromodichloromethane	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
cis-1,3-Dichloropropene	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
4-Methyl-2-pentanone	5.0	U	50	U	5.0	U	50	U	5.0	U
Toluene	1.3		1.2	J	0.50	U	5.0	U	0.50	U
trans-1,3-Dichloropropene	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
1,1,2-Trichloroethane	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U

Case #: 37367 SDG : E2PP2
Site : LANE STREET GROUND WATER CONTAMINATION
A4
Date :

Sample Number :	E2Q42		E2Q42DL		E2Q46		E2Q46DL		E2Q60	
Sampling Location :	GW116		GW116		GW117		GW117		GW100	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	4/16/2008				4/16/2008				4/16/2008	
Time Sampled :										
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :	2.0		2.0		2.0		2.0		2.0	
Dilution Factor :	1.0		10.0		1.0		10.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
2-Hexanone	5.0	U	50	U	5.0	U	50	U	5.0	U
Dibromochloromethane	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
1,2-Dibromoethane	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
Chlorobenzene	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
Ethylbenzene	0.30	J	5.0	U	0.50	U	5.0	U	0.50	U
o-Xylene	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
m,p-Xylene	0.46	J	5.0	U	0.50	U	5.0	U	0.50	U
Styrene	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
Bromoform	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
Isopropylbenzene	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
1,1,2,2-Tetrachloroethane	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
[illegible]ichlorobenzene	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
[illegible]Dichlorobenzene	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
1,2-Dichlorobenzene	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
1,2-Dibromo-3-chloropropane	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
1,2,4-Trichlorobenzene	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U
1,2,3-Trichlorobenzene	0.50	U	5.0	U	0.50	U	5.0	U	0.50	U

Case #: 37367 SDG : E2PP2
Site : LANE STREET GROUND WATER CONTAMINATION
' A4
wer :
Date :

Sample Number :	E2Q61		E2Q61MS		E2Q61MSD		E2Q62		E2Q62DL	
Sampling Location :	GW101		GW101		GW101		GW102		GW102	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	4/16/2008						4/16/2008			
Time Sampled :										
%Moisture :	N/A		0		0		N/A		N/A	
pH :	2.0		2.0		2.0		2.0		2.0	
Dilution Factor :	1.0		1.0		1.0		1.0		4.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U
Chloromethane	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U
Vinyl chloride	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U
Bromomethane	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U
Chloroethane	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U
Trichlorofluoromethane	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U
1,1-Dichloroethene	0.50	U	5.8	J	6.1	J	0.50	U	2.0	U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U
Acetone	5.0	U	5.0	U	5.0	U	5.0	U	20	U
Carbon Disulfide	0.50	U	0.50	U	0.50	U	0.17	J	2.0	U
Methyl acetate	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U
Methylene chloride	0.34	J	0.50	U	0.54	U	0.50	U	2.0	U
-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U
yl tert-butyl ether	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U
1,1-Dichloroethane	0.73		0.50	U	0.50	U	0.50	U	2.0	U
cis-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U
2-Butanone	5.0	U	5.0	U	5.0	U	5.0	U	20	U
Bromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U
Chloroform	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U
1,1,1-Trichloroethane	0.50	U	0.50	U	0.50	U	2.3		2.0	U
Cyclohexane	0.50	U	0.50	U	0.50	U	0.43	J	2.0	U
Carbon tetrachloride	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U
Benzene	0.50	U	5.9		6.0		0.36	J	2.0	U
1,2-Dichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U
Trichloroethene	18	J	24	J	21	J	47	J	24	
Methylcyclohexane	0.50	U	0.50	U	0.50	U	0.54		2.0	U
1,2-Dichloropropane	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U
Bromodichloromethane	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U
cis-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U
4-Methyl-2-pentanone	5.0	U	5.0	U	5.0	U	5.0	U	20	U
Toluene	0.50	U	5.8		5.7		0.81		2.0	U
trans-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U
1,1,2-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U

Case #: 37367 SDG : E2PP2
Site : LANE STREET GROUND WATER CONTAMINATION
[illegible] : A4
[illegible]ewer :
[illegible]ate :

Sample Number :	E2Q61		E2Q61MS		E2Q61MSD		E2Q62		E2Q62DL	
Sampling Location :	GW101		GW101		GW101		GW102		GW102	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	4/16/2008						4/16/2008			
Time Sampled :										
%Moisture :	N/A		0		0		N/A		N/A	
pH :	2.0		2.0		2.0		2.0		2.0	
Dilution Factor :	1.0		1.0		1.0		1.0		4.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.50	U	0.50	U	0.50	U	1.5		2.0	U
2-Hexanone	5.0	U	5.0	U	5.0	U	5.0	U	20	U
Dibromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U
1,2-Dibromoethane	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U
Chlorobenzene	0.50	U	5.7		5.6		0.50	U	2.0	U
Ethylbenzene	0.50	U	0.50	U	0.50	U	0.31	J	2.0	U
o-Xylene	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U
m,p-Xylene	0.50	U	0.50	U	0.50	U	0.39	J	2.0	U
Styrene	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U
Bromoform	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U
Isopropylbenzene	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U
1,1,2,2-Tetrachloroethane	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U
[illegible] Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U
[illegible]ichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U
[illegible],2-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U
1,2-Dibromo-3-chloropropane	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U
1,2,4-Trichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U
1,2,3-Trichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	2.0	U

Case #: 37367 SDG : E2PP2
Site : LANE STREET GROUND WATER CONTAMINATION
: A4
ewer :
Date :

Sample Number :	E2Q63		E2Q64		E2Q64DL		E2Q65		E2Q65DL	
Sampling Location :	GW110		GW111		GW111		GW112		GW112	
Matrix :	Water		Water		Water		Water		Water	
Units	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	4/16/2008		4/16/2008				4/16/2008			
Time Sampled :										
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :	2.0		2.0		2.0		2.0		2.0	
Dilution Factor :	1.0		1.0		5.0		1.0		10.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
Chloromethane	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
Vinyl chloride	0.50	UJ	0.50	U	2.5	UJ	0.50	U	5.0	U
Bromomethane	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
Chloroethane	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
Trichlorofluoromethane	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
1,1-Dichloroethene	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
Acetone	5.0	U	5.0	U	25	U	5.0	U	50	U
Carbon Disulfide	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
Methyl acetate	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
Methylene chloride	0.50	U	0.31	J	2.5	U	0.50	U	5.0	U
-1,2-Dichloroethene	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
yl ert-butyl ether	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
1,1-Dichloroethane	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
cis-1,2-Dichloroethene	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
2-Butanone	5.0	U	5.0	U	25	U	5.0	U	50	U
Bromochloromethane	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
Chloroform	0.50	UJ	0.50	U	2.5	UJ	0.50	U	5.0	U
1,1,1-Trichloroethane	0.50	U	1.2		1.6	J	1.7		5.0	U
Cyclohexane	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
Carbon tetrachloride	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
Benzene	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
1,2-Dichloroethane	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
Trichloroethene	0.50	U	46	J	55		60	J	35	
Methylcyclohexane	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
1,2-Dichloropropane	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
Bromodichloromethane	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
cis-1,3-Dichloropropene	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
4-Methyl-2-pentanone	5.0	U	5.0	U	25	U	5.0	U	50	U
Toluene	0.50	U	0.23	J	2.5	U	0.17	J	5.0	U
trans-1,3-Dichloropropene	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
1,1,2-Trichloroethane	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U

Case #: 37367 SDG : E2PP2
Site : LANE STREET GROUND WATER CONTAMINATION
: A4
ewer :
Date :

Sample Number :	E2Q63		E2Q64		E2Q64DL		E2Q65		E2Q65DL	
Sampling Location :	GW110		GW111		GW111		GW112		GW112	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	4/16/2008		4/16/2008				4/16/2008			
Time Sampled :										
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :	2.0		2.0		2.0		2.0		2.0	
Dilution Factor :	1.0		1.0		5.0		1.0		10.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
2-Hexanone	5.0	U	5.0	U	25	U	5.0	U	50	U
Dibromochloromethane	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
1,2-Dibromoethane	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
Chlorobenzene	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
Ethylbenzene	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
o-Xylene	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
m,p-Xylene	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
Styrene	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
Bromoform	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
Isopropylbenzene	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
1,1,2,2-Tetrachloroethane	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
Dichlorobenzene	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
Dichlorobenzene	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
1,2-Dichlorobenzene	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
1,2-Dibromo-3-chloropropane	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
1,2,4-Trichlorobenzene	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U
1,2,3-Trichlorobenzene	0.50	U	0.50	U	2.5	U	0.50	U	5.0	U

Case #: 37367 SDG : E2PP2
Site : LANE STREET GROUND WATER CONTAMINATION
A4
Reviewer :
Date :

Sample Number :	E2Q98		E2Q99		VBLK86		VBLK87		VBLK88	
Sampling Location :	GW103		GW99							
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	4/16/2008		4/16/2008							
Time Sampled :										
%Moisture :	N/A		N/A		0		0		0	
pH :	2.0		2.0							
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Vinyl chloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromomethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Trichlorofluoromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Acetone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Carbon Disulfide	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methyl acetate	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methylene chloride	0.28	J	0.50	U	0.50	U	0.20	J	0.53	
-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
nyl tert-butyl ether	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
cis-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
2-Butanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Bromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroform	7.2		0.50	U	0.50	U	0.50	U	0.50	U
1,1,1-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Cyclohexane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Carbon tetrachloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Benzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Trichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methylcyclohexane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichloropropane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromodichloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
cis-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
4-Methyl-2-pentanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Toluene	0.50	U	0.40	J	0.50	U	0.50	U	0.50	U
trans-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U

Case #: 37367 SDG : E2PP2
Site : LANE STREET GROUND WATER CONTAMINATION
: A4
ewer :
Date :

Sample Number :	E2Q98		E2Q99		VBLK86		VBLK87		VBLK88	
Sampling Location :	GW103		GW99							
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	4/16/2008		4/16/2008							
Time Sampled :										
%Moisture :	N/A		N/A		0		0		0	
pH :	2.0		2.0							
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
2-Hexanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Dibromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromoethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Ethylbenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
o-Xylene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
m,p-Xylene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Styrene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromoform	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Isopropylbenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2,2-Tetrachloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromo-3-chloropropane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2,4-Trichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2,3-Trichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U

Case #: 37367 SDG : E2PP2
Site : LANE STREET GROUND WATER CONTAMINATION
A4
,ewer :
Date :

Sample Number :	VBLKJJ		VBLKJK		VBLKJL		VBLKJN		VBLKJP	
Sampling Location :										
Matrix :	Water		Water		Water		Water		Water	
Units	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :										
Time Sampled :										
%Moisture :	0		0		0		0		0	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound.	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Vinyl chloride	0.50	UJ	0.50	UJ	0.50	UJ	0.50	U	0.50	U
Bromomethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Trichlorofluoromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Acetone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Carbon Disulfide	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methyl acetate	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methylene chloride	0.34	J	0.48	J	0.55		0.50	U	0.57	
-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
.thyl tert-butyl ether	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
cis-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
2-Butanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Bromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroform	0.50	UJ	0.50	UJ	0.50	UJ	0.50	U	0.50	U
1,1,1-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Cyclohexane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Carbon tetrachloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Benzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Trichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methylcyclohexane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichloropropane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromodichloromethane	0.50	U	0.32	J	0.32	J	0.50	U	0.50	U
cis-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
4-Methyl-2-pentanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Toluene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
trans-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U

Case #: 37367 SDG : E2PP2
Site : LANE STREET GROUND WATER CONTAMINATION
: A4
.ewer :
Date :

Sample Number :	VBLKJJ		VBLKJK		VBLKJL		VBLKJN		VBLKJP	
Sampling Location :										
Matrix :	Water		Water		Water		Water		Water	
Units	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :										
Time Sampled :										
%Moisture :	0		0		0		0		0	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
2-Hexanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Dibromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromoethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Ethylbenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
o-Xylene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
m,p-Xylene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Styrene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromoform	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Isopropylbenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2,2-Tetrachloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromo-3-chloropropane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2,4-Trichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2,3-Trichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U

Case #: 37367 SDG : E2PP2
Site : LANE STREET GROUND WATER CONTAMINATION
A4
Reviewer :
Date :

Sample Number :	VBLKJR		VBLKJV		VHBLK01					
Sampling Location :										
Matrix :	Water		Water		Water					
Units :	ug/L		ug/L		ug/L					
Date Sampled :										
Time Sampled :										
%Moisture :	0		0		N/A					
pH :					2.0					
Dilution Factor :	1.0		1.0		1.0					
Trace Volatile Compound	*Result*	*Flag*	*Result*	*Flag*	*Result*	*Flag*	*Result*	*Flag*	*Result*	*Flag*
Dichlorodifluoromethane	0.50	U	0.50	U	0.50	U				
Chloromethane	0.50	U	0.50	U	0.50	U				
Vinyl chloride	0.50	U	0.50	U	0.50	U				
Bromomethane	0.50	U	0.50	U	0.50	U				
Chloroethane	0.50	U	0.50	U	0.50	U				
Trichlorofluoromethane	0.50	U	0.50	U	0.50	U				
1,1-Dichloroethene	0.50	U	0.50	U	0.50	U				
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.50	U	0.50	U				
Acetone	5.0	U	5.0	U	5.0	U				
Carbon Disulfide	0.50	U	0.50	U	0.50	U				
Methyl acetate	0.50	U	0.50	U	0.50	U				
Methylene chloride	0.19	J	0.50	U	0.50	U				
trans-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U				
Methyl tert-butyl ether	0.50	U	0.50	U	0.50	U				
1,1-Dichloroethane	0.50	U	0.50	U	0.50	U				
cis-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U				
2-Butanone	5.0	U	5.0	U	5.0	U				
Bromochloromethane	0.50	U	0.50	U	0.50	U				
Chloroform	0.50	U	0.50	U	0.50	U				
1,1,1-Trichloroethane	0.50	U	0.50	U	0.50	U				
Cyclohexane	0.50	U	0.50	U	0.50	U				
Carbon tetrachloride	0.50	U	0.50	U	0.50	U				
Benzene	0.50	U	0.50	U	0.50	U				
1,2-Dichloroethane	0.50	U	0.50	U	0.50	U				
Trichloroethene	0.50	U	0.50	U	0.50	U				
Methylcyclohexane	0.50	U	0.50	U	0.50	U				
1,2-Dichloropropane	0.50	U	0.50	U	0.50	U				
Bromodichloromethane	0.50	U	0.50	U	0.50	U				
cis-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U				
4-Methyl-2-pentanone	5.0	U	5.0	U	5.0	U				
Toluene	0.50	U	0.50	U	0.50	U				
trans-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U				
1,1,2-Trichloroethane	0.50	U	0.50	U	0.50	U				

Case #: 37367 SDG : E2PP2
Site : LANE STREET GROUND WATER CONTAMINATION
A4
Viewer :
Date :

Sample Number :	VBLKJR		VBLKJV		VHBLK01					
Sampling Location :										
Matrix :	Water		Water		Water					
Units :	ug/L		ug/L		ug/L					
Date Sampled :										
Time Sampled :										
%Moisture :	0		0		N/A					
pH :					2.0					
Dilution Factor :	1.0		1.0		1.0					
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.50	U	0.50	U	0.50	U				
2-Hexanone	5.0	U	5.0	U	5.0	U				
Dibromochloromethane	0.50	U	0.50	U	0.50	U				
1,2-Dibromoethane	0.50	U	0.50	U	0.50	U				
Chlorobenzene	0.50	U	0.50	U	0.50	U				
Ethylbenzene	0.50	U	0.50	U	0.50	U				
o-Xylene	0.50	U	0.50	U	0.50	U				
m,p-Xylene	0.50	U	0.50	U	0.50	U				
Styrene	0.50	U	0.50	U	0.50	U				
Bromoform	0.50	U	0.50	U	0.50	U				
Isopropylbenzene	0.50	U	0.50	U	0.50	U				
1 1 2,2-Tetrachloroethane	0.50	U	0.50	U	0.50	U				
ichlorobenzene	0.50	U	0.50	U	0.50	U				
-Dichlorobenzene	0.50	U	0.50	U	0.50	U				
1,2-Dichlorobenzene	0.50	U	0.50	U	0.50	U				
1,2-Dibromo-3-chloropropane	0.50	U	0.50	U	0.50	U				
1,2,4-Trichlorobenzene	0.50	U	0.50	U	0.50	U				
1,2,3-Trichlorobenzene	0.50	U	0.50	U	0.50	U				

Lab A4 (A4 Scientific) **SDG** E2PP2 **Case** 37367 **Contract** EPW05036 **Region** 5 **DDTID** 58798 **SOW** SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2PP2 Location=GW106 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
E966796	Total Alkane TICs		4.0	ug/L	J
E966796	Total Alkane TICs		4.0		

Lab A4 (A4 Scientific) **SDG** E2PP2 **Case** 37367 **Contract** EPW05036 **Region** 5 **DDTID** 58798 **SOW** SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2PP8 Location=GW107 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
E966796	Total Alkane TICs	2.9		ug/L	
E966796	Total Alkane TICs	2.9			J

Lab A4 (A4 Scientific) **SDG** E2PP2 **Case** 37367 **Contract** EPW05036 **Region** 5 **DDTID** 58798 **SOW** SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2PP8DL Location=No_TR_data Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration	Lab Qualifier
			ug/L	

Lab A4 (A4 Scientific) **SDG** E2PP2 **Case** 37367 **Contract** EPW05036 **Region** 5 **DDTID** 58798 **SOW** SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2PP9 Location=GW97 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
E966796	Total Alkane TICs		2.4	ug/L	J
E966796	Total Alkane TICs		2.4		
123-72-8	Butanal	4.84	1.1		JN

Lab A4 (A4 Scientific) **SDG** E2PP2 **Case** 37367 **Contract** EPW05036 **Region** 5 **DDTID** 58798 **SOW** SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2PQ1 Location=GW98 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
E966796	Total Alkane TICs		1.6	ug/L	J
E966796	Total Alkane TICs		1.6		

Lab A4 (A4 Scientific) **SDG** E2PP2 **Case** 37367 **Contract** EPW05036 **Region** 5 **DDTID** 58798 **SOW** SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2PT6 Location=GW94 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
E966796	Total Alkane TICs	6.4		ug/L	J
E966796	Total Alkane TICs	6.4			

Lab A4 (A4 Scientific) **SDG** E2PP2 **Case** 37367 **Contract** EPW05036 **Region** 5 **DDTID** 58798 **SOW** SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2PT7 Location=GW95 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
E966796	Total Alkane TICs	7.0		ug/L	J
E966796	Total Alkane TICs	7.0			

Lab A4 (A4 Scientific) SDG E2PP2 Case 37367 Contract EPW05036 Region 5 DDTID 58798 SOW SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2PT8 Location=GW96 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
Unknown-01	Unknown-01	3.41	0.65	ug/L	J

Lab A4 (A4 Scientific) **SDG** E2PP2 **Case** 37367 **Contract** EPW05036 **Region** 5 **DDTID** 58798 **SOW** SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2Q01 Location=GW104 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
E966796	Total Alkane TICs		2.8	ug/L	
E966796	Total Alkane TICs		2.8		J
000556-67-2	Cyclotetrasiloxane, octamet..	12.42	0.53		JN

Lab A4 (A4 Scientific) **SDG** E2PP2 **Case** 37367 **Contract** EPW05036 **Region** 5 **DDTID** 58798 **SOW** SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2Q40 Location=GW114 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
E966796	Total Alkane TICs		0.84	ug/L	
E966796	Total Alkane TICs		0.84		JB
Unknown-01	Unknown-01	9.14	0.52		J
000556-67-2	Cyclotetrasiloxane, octamet..	12.42	0.70		JN

Lab A4 (A4 Scientific) **SDG** E2PP2 **Case** 37367 **Contract** EPW05036 **Region** 5 **DDTID** 58798 **SOW** SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2Q41 Location=GW115 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
E966796	Total Alkane TICs		1.4	ug/L	JB
E966796	Total Alkane TICs		1.4		
Unknown-01	Unknown-01	4.47	0.63		J
000541-05-9	Cyclotrisiloxane, hexamethyl	9.13	0.67		JN
000556-67-2	Cyclotetrasiloxane, octamet..	12.41	1.0		JN

Lab A4 (A4 Scientific) **SDG** E2PP2 **Case** 37367 **Contract** EPW05036 **Region** 5 **DDTID** 58798 **SOW** SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2Q42 Location=GW116 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
E966796	Total Alkane TICs	6.4		ug/L	J
E966796	Total Alkane TICs	6.4			

Lab A4 (A4 Scientific) **SDG** E2PP2 **Case** 37367 **Contract** EPW05036 **Region** 5 **DDTID** 58798 **SOW** SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2Q46 Location=GW117 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
E966796	Total Alkane TICs		0.99	ug/L	
E966796	Total Alkane TICs		0.99		J
000544-25-2	1,3,5-Cycloheptatriene	8.62	0.87		JN

Lab A4 (A4 Scientific) **SDG** E2PP2 **Case** 37367 **Contract** EPW05036 **Region** 5 **DDTID** 58798 **SOW** SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2Q62 Location=GW102 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
E966796	Total Alkane TICs	7.4		ug/L	
E966796	Total Alkane TICs	7.4			J

Lab A4 (A4 Scientific) **SDG** E2PP2 **Case** 37367 **Contract** EPW05036 **Region** 5 **DDTID** 58798 **SOW** SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2Q62DL Location=No_TR_data Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
Unknown-01	Unknown-01	1.72	1600	ug/L	JD
Unknown-02	Unknown-02	7.88	11		JD

Lab A4 (A4 Scientific) SDG E2PP2 Case 37367 Contract EPW05036 Region 5 DDTID 58798 SOW SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2Q99 Location=GW99 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
E966796	Total Alkane TICs	2.1		ug/L	
E966796	Total Alkane TICs	2.1			J

Lab A4 (A4 Scientific) SDG E2PP2 Case 37367 Contract EPW05036 Region 5 DDTID 58798 SOW SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=VBLKJJ Location=No_TR_data Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
Unknown-01	Unknown-01	1.9	68	ug/L	J
Unknown-02	Unknown-02	1.97	250		J
Unknown-03	Unknown-03	8.12	4.1		J

Lab A4 (A4 Scientific) **SDG** E2PP2 **Case** 37367 **Contract** EPW05036 **Region** 5 **DDTID** 58798 **SOW** SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=VBLKJN Location=No_TR_data Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
124-19-6	Nonanal	14.31	1.5	ug/L	JN

Lab A4 (A4 Scientific) **SDG** E2PP2 **Case** 37367 **Contract** EPW05036 **Region** 5 **DDTID** 58798 **SOW** SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=VBLKJP Location=No_TR_data Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
Unknown-01	Unknown-01	14.32	0.59	ug/L	J

Lab A4 (A4 Scientific) **SDG** E2PP2 **Case** 37367 **Contract** EPW05036 **Region** 5 **DDTID** 58798 **SOW** SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=VBLKJR Location=No_TR_data Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
E966796	Total Alkane TICs		0.56	ug/L	J
Unknown-01	Unknown-01	14.31	0.93		J

Regional Transmittal Form

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE:

SUBJECT: Review of Data
Received for Review on 9 May 08

FROM: Stephen L. Ostrodka, Chief (SRT-4J)
Superfund Field Services Section

TO: Data User: IDEM

We have reviewed the data for the following case:

SITE NAME: LANE Street GW Contamination (IN)

CASE NUMBER: 37367 SDG NUMBER: E2PP2

Number and Type of Samples: 20 water samples

Sample Numbers: E2PP2; P8-P9; Q2; T6-T8; Q01; Q40-42; Q46; Q60-65
E2Q98-Q99

Laboratory: AH Scientific, INC. Hrs for Review:

Following are our findings:

Howard Pham
Region 5 TPO
Mail Code: SRT-4J

SAMPLE DELIVERY GROUP (SDG)
COVER SHEET

SDG Number: E2PP2-Revised

Laboratory Name: A4 SCIENTIFIC, INC. **Laboratory Code:** A4

Contract No.: EPW05036 **Case No.:** 37367

Analysis Price: $416.00 **SDG Turnaround:** 21 days

Modified Analysis (if applicable):

Modification Reference No.:

EPA Sample Numbers in SDG (Listed in Numerical Order)

1) E2PP2	7) E2PT8	13) E2Q60	19) E2Q98
2) E2PP8	8) E2Q01	14) E2Q61	20) E2Q99
3) E2PP9	9) E2Q40	15) E2Q62	21)
4) E2PQ1	10) E2Q41	16) E2Q63	22)
5) E2PT6	11) E2Q42	17) E2Q64	23)
6) E2PT7	12) E2Q46	18) E2Q65	24)

E2PP2	E2Q99
First Sample in SDG	Last Sample in SDG
04/17/2008	04/17/2008
First Sample Receipt Date	Last Sample Receipt Date

*Note: There are a maximum of 20 **field** samples [excluding Performance Evaluation (PE) Samples] in an SDG. Attach the TR/COC Records to this form in alphanumeric order (the order listed above on this form).*

Jessica Schulze
Signature

4/18/08
Date

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

DAS No: 2 4/17/08
SDG No: E2PP2

L

Date Shipped:	4/16/2008
Carrier Name:	FedEx
Airbill:	811417052850
Shipped to:	A4 Scientific, Inc. 1544 Sawdust Road Suite 505 The Woodlands TX 77380 (281) 292-5277

Chain of Custody Record

Relinquished By	(Date / Time)	Received By	(Date / Time)
1	4-16-08/8:00		
2			
3			
4		J. Schulz	4/17/08 10:00

Sampler Signature:

For Lab Use Only

Lab Contract No: EPW05036
Unit Price: 0
Transfer To:
Lab Contract No:
Unit Price: 4/17/08

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
E2PP2	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C244823 (HCL) (1)	GW106	S: 4/16/2006	15:58	00089419-01	Intact
E2PP8	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099901 (HCL) (1)	GW107	S: 4/16/2008	15:35	-02	
E2Q01	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C244821 (HCL) (1)	GW104	S: 4/16/2008	16:18	-03	
E2Q40	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099908 (HCL) (1)	GW114	S: 4/16/2008	17:24	-04	
E2Q41	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099909 (HCL) (1)	GW115	S: 4/16/2008	17:42	-05	
E2Q42	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099910 (HCL) (1)	GW116	S: 4/16/2008	17:56	-06	
E2Q46	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099911 (HCL) (1)	GW117	S: 4/16/2008	17:56	-07	
E2Q63	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099904 (HCL) (1)	GW110	S: 4/16/2008	16:02	-08	
E2Q64	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099905 (HCL) (1)	GW111	S: 4/16/2008	16:15	-09	
E2Q65	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099906 (HCL) (1)	GW112	S: 4/16/2008	16:26	-10	

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 5°C	Chain of Custody Seal Number: 27900, 23687
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? Y / Shipment Iced? Y

CLP TVOA = CLP TCL Trace Volatiles

TR Number: 5-551068049-041708-0002

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

DAS No: 2 ~~4/17/08~~
SDG No: E3PP2

L

Date Shipped:	4/16/2008
Carrier Name:	FedEx
Airbill:	811417071925
Shipped to:	A4 Scientific, Inc. 1544 Sawdust Road Suite 505 The Woodlands TX 77380 (281) 292-5277

Chain of Custody Record

	Relinquished By	(Date / Time)	Received By	(Date / Time)
1	[signature]	4/16/2008		
2		7:30pm		
3				
4			[signature]	4/17/08 10:00

Sampler Signature:

For Lab Use Only

Lab Contract No: EPW05036
Unit Price: 0
Transfer To:
Lab Contract No: DS 4/17/08
Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
E2PP9	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C244812 (HCL) (1)	GW97	S: 4/16/2008	12:32	0008949-11	Intact
E2PQ1	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C244813 (HCL) (1)	GW98	S: 4/16/2008	12:14	-12	
E2PT6	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C244809 (HCL) (1)	GW94	S: 4/16/2008	10:24	-13	
E2PT7	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C244810 (HCL) (1)	GW95	S: 4/16/2008	10:13	-14	
E2PT8	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C244811 (HCL) (1)	GW96	S: 4/16/2008	9:56	-15	
E2Q60	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C244815 (HCL) (1)	GW100	S: 4/16/2008	14:40	-16	
E2Q61	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C244816 (HCL), 5C244817 (HCL), 5C244818 (HCL) (3)	GW101	S: 4/16/2008	15:27	-17	
E2Q62	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C244819 (HCL) (1)	GW102	S: 4/16/2008	15:10	-18	
E2Q98	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C244820 (HCL) (1)	GW103	S: 4/16/2008	8:00	-19	
E2Q99	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C244814 (HCL) (1)	GW99	S: 4/16/2008	11:55	-20	Final Sdg Sx

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
	E2Q61	[signature] [signature]	4°C	23949, 23840

Analysis Key: Concentration: L = Low, M = Low/Medium, H = High Type/Designate: Composite = C, Grab = G

Custody Seal Intact? Y Shipment Iced? Y

CLP TVOA = CLP TCL Trace Volatiles

TR Number: 5-551068049-041708-0001

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax

A4 SCIENTIFIC, INC.
1544 Sawdust Road, Suite505•The Woodlands, TX 77380•Phone (281) 292-5277

Contract #: EPW05036	Case #: 37367	SDG #: E2PP2

SDG NARRATIVE

SAMPLE RECEIPT & LOGIN

The following samples were received on the dates listed against them. The samples were logged in for analysis as listed.

EPA SAMPLE #	LAB SAMPLE #	DATE/TIME RECEIVED	AIRBILL NO.	ANALYSIS	Total # of Containers Received	MATRIX	REMARKS
E2PP2	0008949-01	04/17/08 10:00	811417052850	TVOA	3	WATER	
E2PP8	0008949-02	04/17/08 10:00	811417052850	TVOA	3	WATER	
E2PP9	0008949-11	04/17/08 10:00	811417071925	TVOA	3	WATER	
E2PQ1	0008949-12	04/17/08 10:00	811417071925	TVOA	3	WATER	
E2PT6	0008949-13	04/17/08 10:00	811417071925	TVOA	3	WATER	
E2PT7	0008949-14	04/17/08 10:00	811417071925	TVOA	3	WATER	
E2Q01	0008949-03	04/17/08 10:00	811417052850	TVOA	3	WATER	
E2Q40	0008949-04	04/17/08 10:00	811417052850	TVOA	3	WATER	
E2Q41	0008949-05	04/17/08 10:00	811417052850	TVOA	3	WATER	
E2Q42	0008949-06	04/17/08 10:00	811417052850	TVOA	3	WATER	
E2Q46	0008949-07	04/17/08 10:00	811417052850	TVOA	3	WATER	
E2Q60	0008949-16	04/17/08 10:00	811417071925	TVOA	3	WATER	
E2Q61	0008949-17	04/17/08 10:00	811417071925	TVOA	9	WATER	MS/MSD
E2Q62	0008949-18	04/17/08 10:00	811417071925	TVOA	3	WATER	
E2Q63	0008949-08	04/17/08 10:00	811417052850	TVOA	3	WATER	
E2Q64	0008949-09	04/17/08 10:00	811417052850	TVOA	3	WATER	
E2Q65	0008949-10	04/17/08 10:00	811417052850	TVOA	3	WATER	
E2Q98	0008949-19	04/17/08 10:00	811417071925	TVOA	3	WATER	
E2Q99	0008949-20	04/17/08 10:00	811417071925	TVOA	3	WATER	

TVOA=CLP TCL Trace Volatiles

The cooler temperatures are listed against the coolers.

DATE RECEIVED	COOLER NO.	Temp (in °C)
04/17/08	1	5
04/17/08	2	4

No discrepancies or issues were noted during sample receipt and login.

VOLATILES TRACE

Samples were analyzed using instrument **C-5973 and F-5973**.

Instrument C-5973 consisted of an Agilent 5973 GC/MS with a 25-meter long DB-624 (Agilent cat#128-1324) column having a 0.2mm ID and 1.12µm film thickness, OI Purge and Trap Model 4560 with an Archon auto sampler. The trap used was a #10 trap (OI Cat# 228122) having an approximate composition of 40% Tenax, 30% Silica gel and 30% CMS.

Instrument F-5973 consisted of an Agilent 5973 GC/MS with a 25-meter long DB-624 (Agilent cat#128-1324) column having a 0.2mm ID and 1.12µm film thickness, OI Purge and Trap Model 4560 with an Archon auto sampler. The trap used was a #10 trap (OI Cat# 228122) having an approximate composition of 40% Tenax, 30% Silica gel and 30% CMS.

Contract #: EPW05036	Case #: 37367	SDG #: E2PP2

All VOA samples had the pH characteristics verified. The reading is listed below.

EPA SAMPLE #	LAB SAMPLE #	pH
E2PP2	0008949-01	≤ 2
E2PP8	0008949-02	≤ 2
E2PP9	0008949-11	≤ 2
E2PQ1	0008949-12	≤ 2
E2PT6	0008949-13	≤ 2
E2PT7	0008949-14	≤ 2
E2Q01	0008949-03	≤ 2
E2Q40	0008949-04	≤ 2
E2Q41	0008949-05	≤ 2
E2Q42	0008949-06	≤ 2
E2Q46	0008949-07	≤ 2
E2Q60	0008949-16	≤ 2
E2Q61	0008949-17	≤ 2
E2Q62	0008949-18	≤ 2
E2Q63	0008949-08	≤ 2
E2Q64	0008949-09	≤ 2
E2Q65	0008949-10	≤ 2
E2Q98	0008949-19	≤ 2
E2Q99	0008949-20	≤ 2

The following samples were run at dilution, listed against them to get all the compounds within range.

EPA SAMPLE ID	DILUTION
E2PP2	25
E2PP8	2
E2Q01	10
E2Q40	10
E2Q41	25
E2Q42	10
E2Q46	10
E2Q62	4
E2Q64	5
E2Q65	10

Manual integrations were performed for the following samples for the compounds listed against them.

VSTD0.586 – Chloroethane
VSTD0.5JJ – Bromomethane

These manual integrations were necessary because the software failed to accurately integrate the entire peak. In all the above instances, the quantitation reports are flagged with "m". A hard copy printout of the manual integration, the scan ranges, and initials of the analyst or manager is included in the data package.

issues were encountered during sample analysis.

A4 SCIENTIFIC, INC.
1544 Sawdust Road, Suite505•The Woodlands, TX 77380•Phone (281) 292-5277

Contract #: EPW05036	Case #: 37367	SDG #: E2PP2

The following equations were used for calculation of the sample results from raw instrument output data:

VOLATILES

Water (Low/Med, Trace & SIM):

$$\text{Concentration } (\mu g/L) = \frac{(Ax)(Is)(Df)}{(Ais)(\overline{RRF})(Vo)}$$

A_x = Area of the characteristic ion (EICP) for the compound to be measured.
A_{is} = Area of the characteristic ion (EICP) for the internal standard.
I_s = Amount of internal standard added in nanograms (ng).

$\overline{RRF}$ = Mean relative response factor from the initial calibration.
V_o = Total volume of water purged, in milliliters (mL).
Df = Dilution factor.

I certify that this Sample Data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy Sample Data Package and in the electronic data deliverable has been authorized by the laboratory Manager or Manager's designee, as verified by the following signature.

Reddy Pakanati / Lab Mgr
Signature and Title

5/8/08
Date of Signature

2A - *FORM II VOA-1*
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: _____ SDG No.: E2PP2

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC1 (VCL) #	VDMC2 (CLA) #	VDMC3 (DCE) #	VDMC4 (BUT) #	VDMC5 (CLF) #	VDMC6 (DCA) #	VDMC7 (BEN) #
01	E2PP2	99	102	88	97	106	109	112
02	E2PP2DL	106	109	90	86	105	111	112
03	E2PP8	113	120	86	201 *	109	113	110
04	E2PP8DL	99	101	79	96	100	102	105
05	E2PP9	106	106	79	109	101	100	103
06	E2PQ1	95	101	83	118	106	117	109
07	E2PT6	108	105	76	118	100	105	100
08	E2PT7	85	92	78	95	111	120	104
09	E2PT8	105	107	85	105	111	119	108
10	E2Q01	99	103	84	80	103	107	109
11	E2Q01DL	103	111	88	94	106	113	110
12	E2Q40	93	99	76	93	101	104	102
13	E2Q40DL	104	107	88	97	107	113	113
14	E2Q41	89	98	73	122	102	113	103
15	E2Q41DL	103	107	84	98	107	114	112
16	E2Q42	107	110	83	218 *	109	115	109
17	E2Q42DL	100	102	83	78	103	108	105
18	E2Q46	99	98	85	66	99	89	115
19	E2Q46DL	98	104	83	88	102	107	107
20	E2Q60	100	102	75	103	100	103	101
21	E2Q61	94	102	79	112	106	115	106
22	E2Q61MS	103	109	114 *	97	96	94	99
23	E2Q61MSD	107	106	112 *	100	103	104	104
24	E2Q62	102	98	76	93	96	94	101
25	E2Q62DL	111	114	80	99	105	103	110
26	E2Q63	106	110	88	75	102	102	111
27	E2Q64	94	101	79	99	103	111	105
28	E2Q64DL	98	104	82	90	103	111	106
29	E2Q65	106	109	92	76	111	110	110
30	E2Q65DL	105	105	80	89	102	93	103

		QC LIMITS
VDMC1	(VCL) = Vinyl chloride-d3	(65-131)
VDMC2	(CLA) = Chloroethane-d5	(71-131)
VDMC3	(DCE) = 1,1-Dichloroethene-d2	(55-104)
VDMC4	(BUT) = 2-Butanone-d5	(49-155)
VDMC5	(CLF) = Chloroform-d	(78-121)
VDMC6	(DCA) = 1,2-Dichloroethane-d4	(78-129)
VDMC7	(BEN) = Benzene-d6	(77-124)

\# Column to be used to flag recovery values
* Value outside of contract required QC limits

2A - FORM II VOA-1
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: _____ SDG No.: E2PP2

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC1 (VCL) #	VDMC2 (CLA) #	VDMC3 (DCE) #	VDMC4 (BUT) #	VDMC5 (CLF) #	VDMC6 (DCA) #	VDMC7 (BEN) #
01	E2Q98	99	104	76	108	107	103	101
02	E2Q99	107	106	77	106	102	105	104
03	VBLK86	105	89	76	97	97	95	99
04	VBLK87	104	103	81	113	103	100	103
05	VBLK88	102	106	80	107	107	97	101
06	VBLKJJ	101	104	81	97	101	111	109
07	VBLKJK	106	110	87	128	105	119	109
08	VBLKJL	113	119	88	100	106	110	114
09	VBLKJN	101	103	80	113	103	111	104
10	VBLKJP	106	105	85	92	104	113	106
11	VBLKJR	93	97	76	93	100	101	102
12	VBLKJV	100	109	87	88	104	107	106
13	VHBLK01	95	108	87	81	103	106	106
14	VIBLK59	100	108	85	114	106	115	109
15	VIBLK60	103	107	83	94	103	108	108
16	VIBLK61	107	110	87	99	106	113	111
17	VIBLK62	88	60 *	0.2 *	138	103	109	132 *
18	VIBLK63	101	104	79	111	103	109	107
19	VIBLK64	101	106	80	98	106	110	105
20	VIBLK65	97	104	81	96	107	115	103
21	VIBLK66	103	108	90	83	112	118	110
22	VIBLK67	101	110	90	84	114	118	111
23	VIBLK68	112	112	93	110	117	120	103
24	VIBLK71	91	93	72	93	99	105	99
25	VIBLK72	95	101	76	107	106	111	102
26								
27								
28								
29								
30								

	QC LIMITS
VDMC1 (VCL) = Vinyl chloride-d3	(65-131)
VDMC2 (CLA) = Chloroethane-d5	(71-131)
VDMC3 (DCE) = 1,1-Dichloroethene-d2	(55-104)
VDMC4 (BUT) = 2-Butanone-d5	(49-155)
VDMC5 (CLF) = Chloroform-d	(78-121)
VDMC6 (DCA) = 1,2-Dichloroethane-d4	(78-129)
VDMC7 (BEN) = Benzene-d6	(77-124)

Column to be used to flag recovery values
* Value outside of contract required QC limits

2B - FORM II VOA-2
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: _____ SDG No.: E2PP2

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC8 (DPA) #	VDMC9 (TOL) #	VDMC10 (TDP) #	VDMC11 (HEX) #	VDMC12 (DXE) #	VDMC13 (TCA) #	VDMC14 (DCZ) #	TOT OUT
01	E2PP2	94	109	105	98		96	106	0
02	E2PP2DL	96	109	102	97		96	105	0
03	E2PP8	92	108	102	106		98	109	1
04	E2PP8DL	93	106	101	101		97	106	0
05	E2PP9	97	104	96	111		99	103	0
06	E2PQ1	98	106	116	136 *		116	108	1
07	E2PT6	102	98	98	107		110	107	0
08	E2PT7	100	105	105	106		99	99	0
09	E2PT8	94	105	112	117		107	110	0
10	E2Q01	94	108	100	90		86	104	0
11	E2Q01DL	94	108	103	105		99	107	0
12	E2Q40	87	102	98	98		93	106	0
13	E2Q40DL	97	109	108	107		106	108	0
14	E2Q41	91	103	114	132		118	112	0
15	E2Q41DL	97	107	106	115		108	110	0
16	E2Q42	98	107	104	113		101	103	1
17	E2Q42DL	90	104	96	91		91	101	0
18	E2Q46	97	114	90	70		74	97	0
19	E2Q46DL	93	104	100	96		92	103	0
20	E2Q60	100	100	91	96		107	99	0
21	E2Q61	99	109	108	120		113	109	0
22	E2Q61MS	97	98	75	84		89	93	1
23	E2Q61MSD	103	103	76	86		93	102	1
24	E2Q62	101	101	86	88		99	101	0
25	E2Q62DL	105	109	91	85		101	104	0
26	E2Q63	93	109	99	87		84	104	0
27	E2Q64	99	107	104	106		103	108	0
28	E2Q64DL	91	104	99	103		102	108	0
29	E2Q65	99	111	100	85		90	105	0
30	E2Q65DL	100	102	84	80		94	99	0

	QC LIMITS
VDMC8 (DPA) = 1,2-Dichloropropane-d6	(79-124)
VDMC9 (TOL) = Toluene-d8	(77-121)
VDMC10 (TDP) = trans-1,3-Dichloropropene-d4	(73-121)
VDMC11 (HEX) = 2-Hexanone-d5	(28-135)
VDMC12 (DXE) = 1,4-Dioxane-d8	(50-150)
VDMC13 (TCA) = 1,1,2,2-Tetrachloroethane-d2	(73-125)
VDMC14 (DCZ) = 1,2-Dichlorobenzene-d4	(80-131)

Column to be used to flag recovery values
* Values outside of contract required QC limits
Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

2B - FORM II VOA-2
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: _____ SDG No.: E2PP2

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC8 (DPA) #	VDMC9 (TOL) #	VDMC10 (TDP) #	VDMC11 (HEX) #	VDMC12 (DXE) #	VDMC13 (TCA) #	VDMC14 (DCZ) #	TOT OUT
31	E2Q98	101	101	98	100		106	108	0
32	E2Q99	101	102	91	100		105	105	0
33	VBLK86	95	98	87	101		93	101	0
34	VBLK87	103	104	91	95		103	101	0
35	VBLK88	97	101	83	90		97	100	0
36	VBLKJJ	93	106	110	117		105	107	0
37	VBLKJK	95	106	115	135		116	109	0
38	VBLKJL	96	112	109	103		95	108	0
39	VBLKJN	96	106	105	117		101	106	0
40	VBLKJP	96	106	100	103		95	103	0
41	VBLKJR	85	103	99	101		92	104	0
42	VBLKJV	95	104	101	95		97	106	0
43	VHBLK01	93	103	99	91		92	107	0
44	VIBLK59	94	106	113	126		110	108	0
45	VIBLK60	94	105	105	110		101	107	0
46	VIBLK61	97	108	107	110		100	108	0
47	VIBLK62	105	119	106	87		97	104	3
48	VIBLK63	96	107	106	114		103	105	0
49	VIBLK64	95	106	99	104		98	106	0
50	VIBLK65	94	103	103	108		100	104	0
51	VIBLK66	97	109	102	95		94	107	0
52	VIBLK67	100	106	99	94		93	107	0
53	VIBLK68	94	104	97	102		95	105	0
54	VIBLK71	85	100	97	95		92	105	0
55	VIBLK72	90	103	104	114		108	107	0
56									
57									
58									
59									
60									

	QC LIMITS
VDMC8 (DPA) = 1,2-Dichloropropane-d6	(79-124)
VDMC9 (TOL) = Toluene-d8	(77-121)
VDMC10 (TDP) = trans-1,3-Dichloropropene-d4	(73-121)
VDMC11 (HEX) = 2-Hexanone-d5	(28-135)
VDMC12 (DXE) = 1,4-Dioxane-d8	(50-150)
VDMC13 (TCA) = 1,1,2,2-Tetrachloroethane-d2	(73-125)
VDMC14 (DCZ) = 1,2-Dichlorobenzene-d4	(80-131)

Column to be used to flag recovery values
* Values outside of contract required QC limits
Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

3A - FORM III VOA-1
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: _____ SDG No.: E2PP2

Matrix Spike - EPA Sample No.: E2Q61 Level: (TRACE or LOW) TRACE

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS %REC #	QC LIMITS REC.
1,1-Dichloroethene	5.0	0.0	5.8	117	61-145
Benzene	5.0	0.0	5.9	118	76-127
Trichloroethene	5.0	18	24	109	71-120
Toluene	5.0	0.0	5.8	115	76-125
Chlorobenzene	5.0	0.0	5.7	113	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %REC #	%RPD #	QC LIMITS	
					RPD	REC.
1,1-Dichloroethene	5.0	6.1	123	5	0-14	61-145
Benzene	5.0	6.0	119	2	0-11	76-127
Trichloroethene	5.0	21	49 *	76 *	0-14	71-120
Toluene	5.0	5.7	115	0	0-13	76-125
Chlorobenzene	5.0	5.6	112	1	0-13	75-130

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 1 out of 5 outside limits
Spike Recovery: 1 out of 10 outside limits

COMMENTS: _____

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref _____ SDG No.: E2PP2

GC Column: DB-624 ID: 0.20 (mm) Init. Calib. Date(s): 04/26/2008 04/26/2008

EPA Sample No.(VSTD#####): VSTD005JJ Date Analyzed: 04/26/2008

Lab File ID (Standard): F8693.D Time Analyzed: 1030

Instrument ID: F-5973 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	241254		10.67		280795		6.63		123015		13.40	
	UPPER LIMIT	482508		11.17		561590		7.13		246030		13.90	
	LOWER LIMIT	120627		10.17		140398		6.13		61508		12.90	
	EPA SAMPLE NO.												
01	VSTD020JJ	259113		10.67		287955		6.63		141898		13.41	
02	VSTD010JJ	241479		10.67		283494		6.63		123742		13.41	
03	VSTD001JJ	223807		10.67		277471		6.63		102231		13.40	
04	VSTD0.5JJ	212632		10.67		263690		6.63		96596		13.40	
05	VBLKJJ	215583		10.67		264820		6.63		98273		13.41	
06	E2Q63	199145		10.67		246360		6.63		92417		13.40	
07	VIBLK59	206724		10.67		249496		6.63		97880		13.41	
08	VIBLK60	197672		10.67		241514		6.63		93403		13.41	
09	E2PQ1	203011		10.67		240466		6.63		98239		13.41	
10	VIBLK61	193953		10.67		234193		6.63		90428		13.41	
11	VSTD005JK	190859		10.67		226061		6.63		101406		13.40	
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref _____ SDG No.: E2PP2

GC Column: DB-624 ID: 0.20 (mm) Init. Calib. Date(s): 04/26/2008 04/26/2008

EPA Sample No.(VSTD#####): VSTD005JK Date Analyzed: 04/26/2008

Lab File ID (Standard): F8708.D Time Analyzed: 1923

Instrument ID: F-5973 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	190859		10.67		226061		6.63		101406		13.40	
	UPPER LIMIT	381718		11.17		452122		7.13		202812		13.90	
	LOWER LIMIT	95430		10.17		113031		6.13		50703		12.90	
	EPA SAMPLE NO.												
01	VBLKJK	198993		10.67		236679		6.63		97576		13.41	
02	E2PT8	190595		10.67		226325		6.63		88553		13.41	
03	E2PP2DL	179729		10.67		219772		6.63		83873		13.41	
04	E2Q01DL	179248		10.67		213791		6.63		80948		13.41	
05	E2Q40DL	171097		10.67		207905		6.63		79141		13.41	
06	E2Q41DL	173158		10.67		212684		6.63		78900		13.40	
07	E2Q42DL	180193		10.67		217079		6.63		81981		13.40	
08	E2Q46DL	175438		10.67		214381		6.63		80227		13.41	
09	E2Q64DL	171429		10.67		206917		6.63		76506		13.41	
10	VSTD005JL	178914		10.67		217351		6.63		88948		13.41	
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref _____ SDG No.: E2PP2

GC Column: DB-624 ID: 0.20 (mm) Init. Calib. Date(s): 04/26/2008 04/26/2008

EPA Sample No.(VSTD#####): VSTD005JL Date Analyzed: 04/27/2008

Lab File ID (Standard): F8730.D Time Analyzed: 0610

Instrument ID: F-5973 Heated Purge: (Y/N) N

	IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD		178914		10.67		217351		6.63		88948		13.41	
	UPPER LIMIT		357828		11.17		434702		7.13		177896		13.91	
	LOWER LIMIT		89457		10.17		108676		6.13		44474		12.91	
	EPA SAMPLE NO.													
01	VBLKJL		178914		10.67		220316		6.63		82865		13.41	
02	E2PP2		177081		10.67		214361		6.63		82758		13.41	
03	E2Q01		168066		10.67		204508		6.63		76938		13.41	
04	VIBLK62		145839		10.70		215223		6.68		66556		13.41	
05	E2Q42		164524		10.67		193030		6.63		83173		13.41	
06	E2PP8		167100		10.67		197339		6.63		79708		13.41	
07	VSTD005JM		168184		10.67		216063		6.63		86403		13.41	
08														
09														
10														
11														
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18														
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20														
21														
22														

IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref _____ SDG No.: E2PP2

GC Column: DB-624 ID: 0.20 (mm) Init. Calib. Date(s): 04/27/2008 04/27/2008

EPA Sample No.(VSTD#####): VSTD00586 Date Analyzed: 04/27/2008

Lab File ID (Standard): C3882.D Time Analyzed: 1815

Instrument ID: C-5973 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	142601		10.44		188001		6.40		62057		13.26	
	UPPER LIMIT	285202		10.94		376002		6.90		124114		13.76	
	LOWER LIMIT	71301		9.94		94001		5.90		31029		12.76	
	EPA SAMPLE NO.												
01	VSTD02086	158434		10.43		209933		6.40		71111		13.26	
02	VSTD01086	157973		10.43		206992		6.40		74595		13.26	
03	VSTD0.586	161710		10.43		207277		6.41		60775		13.26	
04	VSTD00186	156475		10.44		200691		6.40		61715		13.26	
05	VBLK86	162757		10.43		204756		6.40		57893		13.26	
06	E2PP9	165098		10.44		207548		6.40		66859		13.26	
07	E2PT6	152022		10.44		191288		6.40		63933		13.26	
08	E2Q60	144555		10.43		185896		6.40		59853		13.26	
09	E2Q98	145396		10.43		186130		6.40		58580		13.26	
10	E2Q99	141124		10.44		182166		6.40		58341		13.26	
11	E2Q62	131077		10.43		174622		6.40		53767		13.26	
12	VSTD00587	130195		10.43		169793		6.40		56037		13.26	
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref _____ SDG No.: E2PP2

GC Column: DB-624 ID: 0.20 (mm) Init. Calib. Date(s): 04/27/2008 04/27/2008

EPA Sample No.(VSTD#####): VSTD00587 Date Analyzed: 04/28/2008

Lab File ID (Standard): C3896.D Time Analyzed: 0144

Instrument ID: C-5973 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	130195		10.43		169793		6.40		56037		13.26	
	UPPER LIMIT	260390		10.93		339586		6.90		112074		13.76	
	LOWER LIMIT	65098		9.93		84897		5.90		28019		12.76	
	EPA SAMPLE NO.												
01	VBLK87	134460		10.44		173811		6.40		52813		13.26	
02	E2Q65DL	125689		10.44		164656		6.40		48296		13.26	
03	E2Q62DL	119984		10.43		159845		6.40		46974		13.26	
04	VSTD00588	111342		10.43		146617		6.40		48504		13.26	
05													
06													
07													
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
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19													
20													
21													
22													

IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref _____ SDG No.: E2PP2

GC Column: DB-624 ID: 0.20 (mm) Init. Calib. Date(s): 04/27/2008 04/27/2008

EPA Sample No.(VSTD#####): VSTD00588 Date Analyzed: 04/28/2008

Lab File ID (Standard): C3906.D Time Analyzed: 0626

Instrument ID: C-5973 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	111342		10.43		146617		6.40		48504		13.26	
	UPPER LIMIT	222684		10.93		293234		6.90		97008		13.76	
	LOWER LIMIT	55671		9.93		73309		5.90		24252		12.76	
	EPA SAMPLE NO.												
01	VBLK88	119160		10.44		152693		6.41		46776		13.26	
02	E2Q61MS	122207		10.44		156813		6.40		45233		13.26	
03	E2Q61MSD	112071		10.43		144423		6.40		45215		13.26	
04	VSTD00589	110043		10.43		149699		6.40		43389		13.26	
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IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref _____ SDG No.: E2PP2

GC Column: DB-624 ID: 0.20 (mm) Init. Calib. Date(s): 04/27/2008 04/27/2008

EPA Sample No.(VSTD#####): VSTD005JN Date Analyzed: 04/27/2008

Lab File ID (Standard): F8748.D Time Analyzed: 1856

Instrument ID: F-5973 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	285740		10.67		341424		6.63		145785		13.41	
	UPPER LIMIT	571480		11.17		682848		7.13		291570		13.91	
	LOWER LIMIT	142870		10.17		170712		6.13		72893		12.91	
	EPA SAMPLE NO.												
01	VSTD020JN	278217		10.67		305050		6.63		151449		13.41	
02	VSTD010JN	255130		10.67		302719		6.63		134337		13.41	
03	VSTD001JN	246655		10.67		293156		6.63		121058		13.41	
04	VSTD0.5JN	240594		10.67		284480		6.63		118426		13.41	
05	VBLKJN	244748		10.67		284981		6.62		119136		13.41	
06	E2PP8DL	236573		10.67		283647		6.63		110711		13.41	
07	E2Q46	197200		10.67		258331		6.63		90290		13.40	
08	VIBLK63	229349		10.67		273407		6.63		108883		13.41	
09	E2Q61	229995		10.67		270784		6.63		110650		13.41	
10	E2Q64	214463		10.67		255631		6.63		99730		13.41	
11	VIBLK64	218804		10.67		257725		6.63		99192		13.41	
12	VSTD005JP	190442		10.67		219100		6.63		96208		13.41	
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IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref _____ SDG No.: E2PP2

GC Column: DB-624 ID: 0.20 (mm) Init. Calib. Date(s): 04/27/2008 04/27/2008

EPA Sample No.(VSTD#####): VSTD005JP Date Analyzed: 04/28/2008

Lab File ID (Standard): F8769.D Time Analyzed: 0603

Instrument ID: F-5973 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	190442		10.67		219100		6.63		96208		13.41	
	UPPER LIMIT	380884		11.17		438200		7.13		192416		13.91	
	LOWER LIMIT	95221		10.17		109550		6.13		48104		12.91	
	EPA SAMPLE NO.												
01	VBLKJP	195996		10.67		235044		6.63		90918		13.41	
02	VIBLK65	189442		10.67		224040		6.63		85940		13.41	
03	E2Q65	171335		10.67		206509		6.63		78764		13.41	
04	VIBLK66	164702		10.67		200589		6.63		68969		13.41	
05	VIBLK67	163698		10.67		198528		6.63		67175		13.41	
06	E2PT7	177357		10.67		208343		6.63		85927		13.41	
07	VIBLK68	166624		10.67		185077		6.63		76995		13.41	
08	VSTD005JQ	163086		10.67		193192		6.63		86851		13.41	
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IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref _____ SDG No.: E2PP2

GC Column: DB-624 ID: 0.20 (mm) Init. Calib. Date(s): 04/29/2008 04/29/2008

EPA Sample No.(VSTD#####): VSTD005JR Date Analyzed: 04/29/2008

Lab File ID (Standard): F8789.D Time Analyzed: 1324

Instrument ID: C-5973 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	242757		10.67		300429		6.63		131838		13.41	
	UPPER LIMIT	485514		11.17		600858		7.13		263676		13.91	
	LOWER LIMIT	121379		10.17		150215		6.13		65919		12.91	
	EPA SAMPLE NO.												
01	VSTD020JR	222392		10.67		262532		6.63		124273		13.41	
02	VSTD010JR	217869		10.67		258831		6.63		121501		13.41	
03	VSTD001JR	202957		10.67		245014		6.63		102903		13.41	
04	VSTD0.5JR	205774		10.67		245524		6.63		108451		13.41	
05	VBLKJR	195017		10.67		238571		6.63		100092		13.41	
06	E2Q40	198186		10.67		236399		6.63		98568		13.41	
07	VIBLK71	197664		10.67		233391		6.63		95960		13.41	
08	E2Q41	200329		10.67		241052		6.63		104230		13.41	
09	VIBLK72	196655		10.67		231525		6.63		100503		13.41	
10	VSTD005JS	188521		10.67		215998		6.63		106840		13.41	
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IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref _____ SDG No.: E2PP2

GC Column: DB-624 ID: 0.20 (mm) Init. Calib. Date(s): 05/02/2008 05/02/2008

EPA Sample No.(VSTD#####): VSTD005JU Date Analyzed: 05/02/2008

Lab File ID (Standard): F8832.D Time Analyzed: 1554

Instrument ID: F-5973 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	305415		10.67		373437		6.63		169512		13.41	
	UPPER LIMIT	610830		11.17		746874		7.13		339024		13.91	
	LOWER LIMIT	152708		10.17		186719		6.13		84756		12.91	
	EPA SAMPLE NO.												
01	VSTD020JU	307025		10.67		371171		6.63		173446		13.41	
02	VSTD010JU	303543		10.67		369180		6.63		167111		13.41	
03	VSTD001JU	299262		10.67		368149		6.63		150558		13.41	
04	VSTD0.5JU	299244		10.67		372067		6.63		156872		13.41	
05	VSTD005JV	258043		10.67		315811		6.63		140955		13.41	
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IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref _____ SDG No.: E2PP2

GC Column: DB-624 ID: 0.20 (mm) Init. Calib. Date(s): 05/02/2008 05/02/2008

EPA Sample No.(VSTD#####): VSTD005JV Date Analyzed: 05/02/2008

Lab File ID (Standard): F8844.D Time Analyzed: 2132

Instrument ID: F-5973 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	258043		10.67		315811		6.63		140955		13.41	
	UPPER LIMIT	516086		11.17		631622		7.13		281910		13.91	
	LOWER LIMIT	129022		10.17		157906		6.13		70478		12.91	
	EPA SAMPLE NO.												
01	VBLKJV	242158		10.68		303598		6.63		120864		13.41	
02	VHBLK01	244531		10.67		304972		6.63		117648		13.41	
03	VSTD005JW	222660		10.67		278360		6.63		109016		13.41	
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IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
VBLK86

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: _____ SDG No.: E2PP2

Lab File ID: C3887.D Lab Sample ID: 8040087-BLK1

Instrument ID: C-5973

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 04/27/2008

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 2125

GC Column: DB-624 ID: 0.20 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E2PP9	0008949-11	C3388.D	2156
02	E2PT6	0008949-13	C3389.D	2225
03	E2Q60	0008949-16	C3390.D	2254
04	E2Q98	0008949-19	C3391.D	2322
05	E2Q99	0008949-20	C3392.D	2351
06	E2Q62	0008949-18	C3395.D	0116
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COMMENTS: _____

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
VBLK87

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: _____ SDG No.: E2PP2

Lab File ID: C3897.D Lab Sample ID: 8040088-BLK1

Instrument ID: C-5973

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 04/28/2008

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 0212

GC Column: DB-624 ID: 0.20 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E2Q65DL	0008949-10RE1	C3898.D	0240
02	E2Q62DL	0008949-18RE1	C3899.D	0308
03				
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COMMENTS: _____

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
VBLK88

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: _____ SDG No.: E2PP2

Lab File ID: C3907.D Lab Sample ID: 8040089-BLK1

Instrument ID: C-5973

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 04/28/2008

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 0724

GC Column: DB-624 ID: 0.20 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E2Q61MS	8040089-MS1	C3908.D	0836
02	E2Q61MSD	8040089-MSD1	C3910.D	0933
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COMMENTS: _____

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
VBLKJJ

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: _____ SDG No.: E2PP2

Lab File ID: F8696.D Lab Sample ID: 8040084-BLK1

Instrument ID: F-5973

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 04/26/2008

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 1248

GC Column: DB-624 ID: 0.20 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E2Q63	0008949-08	F8700.D	1528
02	VIBLK59	8040084-CCB1	F8702.D	1629
03	VIBLK60	8040084-CCB2	F8704.D	1724
04	E2PQ1	0008949-12	F8706.D	1824
05	VIBLK61	8040084-CCB3	F8707.D	1855
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COMMENTS: _____

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
VBLKJK

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: _____ SDG No.: E2PP2

Lab File ID: F8709.D Lab Sample ID: 8040083-BLK1

Instrument ID: F-5973

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 04/26/2008

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 1951

GC Column: DB-624 ID: 0.20 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E2PT8	0008949-15	F8719.D	0105
02	E2PP2DL	0008949-01RE1	F8720.D	0133
03	E2Q01DL	0008949-03RE1	F8722.D	0228
04	E2Q40DL	0008949-04RE1	F8723.D	0256
05	E2Q41DL	0008949-05RE1	F8724.D	0323
06	E2Q42DL	0008949-06RE1	F8725.D	0351
07	E2Q46DL	0008949-07RE1	F8726.D	0419
08	E2Q64DL	0008949-09RE1	F8727.D	0447
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COMMENTS: _____

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
VBLKJL

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: _____ SDG No.: E2PP2

Lab File ID: F8731.D Lab Sample ID: 8040086-BLK1

Instrument ID: F-5973

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 04/27/2008

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 0810

GC Column: DB-624 ID: 0.20 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E2PP2	0008949-01	F8732.D	0844
02	E2Q01	0008949-03	F8734.D	0940
03	VIBLK62	8040086-CCB1	F8737.D	1105
04	E2Q42	0008949-06	F8741.D	1258
05	E2PP8	0008949-02	F8743.D	1401
06				
07				
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COMMENTS: _____

4A - FORM 1V VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
VBLKJN

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: SDG No.: E2PP2

Lab File ID: F8753.D Lab Sample ID: 8040093-BLK1

Instrument ID: F-5973

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 04/27/2008

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 2245

GC Column: DB-624 ID: 0.20 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E2PP8DL	0008949-02RE1	F8754.D	2313
02	E2Q46	0008949-07	F8755.D	2343
03	VIBLK63	8040093-CCB1	F8756.D	0011
04	E2Q61	0008949-17	F8757.D	0038
05	E2Q64	0008949-09	F8759.D	0132
06	VIBLK64	8040093-CCB2	F8761.D	0226
07				
08				
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COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
VBLKJP

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: _____ SDG No.: E2PP2

Lab File ID: F8770.D Lab Sample ID: 8040094-BLK1

Instrument ID: F-5973

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 04/28/2008

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 0630

GC Column: DB-624 ID: 0.20 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VIBLK65	8040094-CCB1	F8774.D	0824
02	E2Q65	0008949-10	F8775.D	0853
03	VIBLK66	8040094-CCB2	F8776.D	0920
04	VIBLK67	8040094-CCB3	F8778.D	1021
05	E2PT7	0008949-14	F8779.D	1053
06	VIBLK68	8040094-CCB4	F8781.D	1155
07				
08				
09				
10				
11				
12				
13				
14				
15				
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COMMENTS: _____

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
VBLKJR

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: _____ SDG No.: E2PP2

Lab File ID: F8795.D Lab Sample ID: 8040097-BLK1

Instrument ID: C-5973

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 04/29/2008

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 1701

GC Column: DB-624 ID: 0.20 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E2Q40	0008949-04	F8798.D	1828
02	VIBLK71	8040097-CCB1	F8799.D	1855
03	E2Q41	0008949-05	F8800.D	1922
04	VIBLK72	8040097-CCB2	F8801.D	1949
05				
06				
07				
08				
09				
10				
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COMMENTS: _____

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
VBLKJV

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: _____ SDG No.: E2PP2

Lab File ID: F8846.D Lab Sample ID: 8050007-BLK1

Instrument ID: F-5973

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 05/02/2008

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 2225

GC Column: DB-624 ID: 0.20 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VHBLK01	0008949-21	F8847.D	2252
02				
03				
04				
05				
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08				
09				
10				
11				
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COMMENTS: _____

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V
ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Sample Delivery Group: E2PP2 CERCLIS No: INH000510229

Case No: 37367 Site Name/Location: Lane Street GW Contamination (IN)

Contractor or EPA Lab: Ad Scientific Data User: IDEM

No. of Samples: 20 Date Sampled or Date Received: 9 May 08

Have Chain-of-Custody records been received? Yes ✓ No

Have traffic reports or packing lists been received? Yes ✓ No

If no, are traffic report or packing list numbers written on the Chain-of-Custody Record?
Yes ____ No ____

If no, which traffic report or packing list numbers are missing?

Are basic data forms in? Yes ✓ No

No of samples claimed: 20 No. of samples received:

Received by: pdavis Date: 9 May 08

Received by LSSS: pdavis Date: 14 May 08

Review started: May 22, 2008 Reviewer Signature: Allison Harvey

Total time spent on review: 14.6 hrs Date review completed: May 27, 2008

Copied by: A. C. Harvey Date: June 4, 2008

Mailed to user by: pdavis Date: 6 June 08

DATA USER:

Please fill in the blanks below and return this form to:
Sylvia Griffin, Data Mgmt. Coordinator, Region V, ML-10C

Data received by: Date:

Data review received by: Date:

Inorganic Data Complete	[ ] Suitable for Intended Purpose [ ] ✓ if OK
Organic Data Complete	[ ] Suitable for Intended Purpose [ ] ✓ if OK
Dioxin data Complete	[ ] Suitable for Intended Purpose [ ] ✓ if OK
SAS Data Complete	[ ] Suitable for Intended Purpose [ ] ✓ if OK

PROBLEMS: Please indicate reasons why data are not suitable for your uses.

Received by Data Mgmt. Coordinator for Files. Date:

ESAT Controlled Number: ESAT5.17.00032-pd 6/30/08

DATE: May 30, 2008

Indiana Dept of Environmental Management
ATTN: Mark Jaworski
100 N. Senate Avenue – Room N1255
Indianapolis, IN 46804-2222

SITE NAME: Lane Street Groundwater Contamination (IN)

CASE #	LAB	SAMPLES	SDG	MATRIX
37367	A4 Scientific	18	E2PP3	water

Upon receipt of data, please check each package for completeness and note any missing deliverables below.

Send this form back to Sylvia Griffin, Data Management Coordinator after filling in the blanks below.

Data Received by:_____ Date:_____

PROBLEMS:

Please indicate if data is complete, and note if there are any deliverables missing from the cases noted above.

_____

_____

Received by Data Management Coordinator, CRL for file.

Signature:_____ Date:_____

FROM: **U.S. EPA - Region 5**
Sylvia Griffin
Central Regional Laboratory
536 S. Clark, 10th Floor
Chicago, IL 60605

Sent By: Pat Davis
Data Coordinator
ESAT Region 5 **TechLaw**

Controlled Document

ESAT5.16.00016

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V
SUPERFUND DIVISION

acH 5-30-08

RECEIVED
JUN 03 2008
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF LAND QUALITY

DATE:

SUBJECT: Review of Data
Received for Review on: May 08, 2008

FROM: Stephen L. Ostrodka, Chief (SRT-4J)
Superfund Field Services Section

TO: Data User: IDEM

By Steve Ostrodka
Richard L Byrnes
5/29/08

We have reviewed the data for the following case:

Site Name: Lane Street Groundwater Contamination (IN)

Case Number: 37367 SDG Number: E2PP3

Number and Type of Samples: 18 water samples (trace VOA)

Sample Numbers: E2PP3, E2PR3 – E2PR6, E2PS3 – E2PS9, E2Q13, E2Q14, E2Q66, E2Q95 - E2Q97

Laboratory: A4 Scientific Inc. Hrs for Review:

Following are our findings:

The data are usable and acceptable with the qualifications described in the attached narrative

Richard L Byrnes

CC: Howard Pham
Region 5 TPO
Mail Code: SRT-4J

Case Number: 37367 SDG Number: E2PP3
Site Name: Lane Street Groundwater Contamination (IN) Laboratory: A4 Scientific Inc.

Below is a summary of the out-of-control audits and the possible effects on the data for this case:

Eighteen (18) water samples labeled E2PP3, E2PR3 – E2PR6, E2PS3 – E2PS9, E2Q13, E2Q14, E2Q66, and E2Q95 - E2Q97, were shipped to A4 Scientific Inc. located in The Woodlands, TX. All water samples were collected on 04-14-2008 through 04-16-2008 and received on 04-15-2008 and 04-17-2008 intact and properly cooled.

All samples were analyzed for the list of trace VOA analytes according to CLP SOW SOM01.2 and reviewed according to the NFG for SOM01.1 and the SOP for ESAT 5/TechLaw Validation of Contract Laboratory Program Organic Data (Version 2.1).

No forms or raw data were submitted for sample E2Q03. Sample E2Q03 was listed in the laboratory narrative as part of this sample delivery group but the sample belongs to Case 37367 sdg E2Q03.

Sample E2PS8 was designated by the samplers to be used for laboratory matrix spike / matrix spike duplicate analyses.

No samples were identified as field blanks or field duplicates.

Reviewed by: Steffanie Tobin/Techlaw-ESAT
Date: May 28, 2008

Case Number: 37367 SDG Number: E2PP3
Site Name: Lane Street Groundwater Contamination (IN) Laboratory: A4 Scientific Inc.

1. HOLDING TIME

No problems were found.

2. GC/MS TUNING AND GC INSTRUMENT PERFORMANCE

No problems were found.

3. CALIBRATION

The following trace VOA samples are associated with an initial calibration with a percent relative standard deviation (%RSD) that exceeded the criteria of 30%. Detected Chloroform in samples E2PP3 and E2Q97 are qualified "J". The non-detected compound is qualified "UJ".

Chloroform
E2PP3, E2PR3, E2PR4, E2PR5, E2PR6, E2PS3, E2PS4, E2PS5, E2PS5DL, E2PS6, E2PS7, E2PS8, E2PS8MS, E2PS8MSD, E2PS9, E2Q13, E2Q14, E2Q66, E2Q66DL, E2Q95, E2Q95DL, E2Q96, E2Q97, VBLK70, VBLK73, VBLK76, VBLK79

The following trace VOA samples are associated with an opening CCV percent difference (%D) greater than 30%. The compounds were not detected in any of the samples. The non-detected compounds are qualified "UJ".

1,2,4-Trichlorobenzene, 1,2,3-Trichlorobenzene
E2Q66DL, E2Q95DL, VBLK79

4. BLANKS

The following trace volatile sample was analyzed after a highly contaminated sample with no intervening instrument blank. Detected compounds are qualified "J" due to the possibility of carry-over.

Trichloroethene
E2PS6

The following trace volatiles samples have common contaminant analyte concentrations reported less than the CRQL. The associated method blank concentration has common contaminant analyte concentration less than 2X the CRQL. Detected compounds are qualified "U". Non-detected compounds are not qualified. Reported sample concentrations have been elevated to the CRQL.

Methylene chloride
E2Q66DL, E2Q95DL

Case Number: 37367 SDG Number: E2PP3
Site Name: Lane Street Groundwater Contamination (IN) Laboratory: A4 Scientific Inc.

5. DEUTERATED MONITORING COMPOUND AND SURROGATE RECOVERY

The following trace VOA samples have one or more DMC/SMC recovery values less than the primary lower limit but greater than or equal to 20%. The compounds were not detected in the samples. The non-detected compounds are qualified "UJ".

E2Q66DL
Dichlorodifluoromethane, Chloromethane, Bromomethane, Chloroethane, Carbon Disulfide

6A. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample E2PS8 was designated by the samplers to be used for laboratory matrix spike / matrix spike duplicate analyses.

No problems were found.

6B. LABORATORY CONTROL SAMPLE

Not applicable to this analysis.

7. FIELD BLANK AND FIELD DUPLICATE

No samples were identified as field blanks or field duplicates.

8. INTERNAL STANDARDS

The laboratory used the IS QC limits for low/medium level VOA (50-200% area and ±0.50 RT) instead of IS QC limits for trace VOA (60-140% area and ±0.33 RT). The IS QC limits for trace VOA were used to re-evaluate the IS recoveries for the samples in this SDG.

No problems were found.

9. COMPOUND IDENTIFICATION

After reviewing the mass spectra and chromatograms it appears that all trace VOA compounds were properly identified.

10. COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

The following trace VOA samples have compound concentrations less than the CRQL. Detected compounds are qualified "J".

E2PS8MSD
4-Methyl-2-pentanone

E2Q14
cis-1,2-Dichloroethene

E2Q66
Carbon disulfide, Cyclohexane, Methylcyclohexane, Ethylbenzene, m,p-Xylene

E2Q66DL
1,1-Dichloroethane

E2Q95
Carbon disulfide, 1,1-Dichloroethane, Ethylbenzene, m,p-Xylene

VBLK76, VBLK79
Methylene chloride

11. SYSTEM PERFORMANCE

GC/MS baseline indicated acceptable performance.

12. ADDITIONAL INFORMATION

The following trace VOA samples have analyte concentrations which exceed the instruments calibration range. The detected results are qualified "J". The results from the diluted analyses should be considered the final concentrations for the affected analytes.

E2PS5, E2Q66, E2Q95
Trichloroethene

Case Number: 37367 SDG Number: E2PP3
Site Name: Lane Street Groundwater Contamination (IN) Laboratory: A4 Scientific Inc.

CADRE Data Qualifier Sheet

Qualifiers	Data Qualifier Definitions
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the action limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
NJ	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification and the associated numerical value represents its approximate concentration.
R	The data are unusable. (The compound may or may not be present.)

Reviewed by: Steffanie Tobin/Techlaw-ESAT
Date: May 28, 2008

Case #: 37367 SDG : E2PP3
Site : LANE STREET GROUND WATER CONTAMINATION Number of Soil Samples : 0
Lab. : A4 Number of Water Samples : 18
Reviewer : Number of Sediment Samples : 0
Date :

Sample Number :	E2PP3		E2PR3		E2PR4		E2PR5		E2PR6	
Sampling Location :	GW12		GW3		GW4		GW10		GW11	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	4/14/2008		4/14/2008		4/14/2008		4/14/2008		4/14/2008	
Time Sampled :										
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :	2.0		2.0		2.0		2.0		2.0	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Vinyl chloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromomethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Trichlorofluoromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloro-1,2,2-trifluoroetha	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Acetone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Carbon Disulfide	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methyl acetate	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methylene chloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
ans-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methyl tert-butyl ether	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	2.3	
cis-1 2-Dichloroethene	0.50	U	0.85		0.50	U	0.50	U	0.50	U
2-Butanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Bromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroform	7.4	J	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ
1,1,1-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Cyclohexane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Carbon tetrachloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Benzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Trichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methylcyclohexane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichloropropane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromodichloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
cis-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
4-Methyl-2-pentanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Toluene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
trans-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U

Case #: 37367 SDG : E2PP3
Site : LANE STREET GROUND WATER CONTAMINATION
Lab. : A4
viewer :
ate :

Sample Number :	E2PP3		E2PR3		E2PR4		E2PR5		E2PR6	
Sampling Location :	GW12		GW3		GW4		GW10		GW11	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	4/14/2008		4/14/2008		4/14/2008		4/14/2008		4/14/2008	
Time Sampled :										
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :	2.0		2.0		2.0		2.0		2.0	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
2-Hexanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Dibromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromoethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Ethylbenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
o-Xylene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
m,p-Xylene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Styrene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromoform	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Isopropylbenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2,2-Tetrachloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,4-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromo-3-chloropropane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2,4-Trichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2,3-Trichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U

Case #: 37367 SDG : E2PP3
Site : LANE STREET GROUND WATER CONTAMINATION
Lab. : A4
Viewer :
Date :

Sample Number :	E2PS3		E2PS4		E2PS5		E2PS5DL		E2PS6	
Sampling Location :	GW1		GW2		GW5		GW5		GW6	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	4/14/2008		4/14/2008		4/14/2008				4/14/2008	
Time Sampled :										
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :	2.0		2.0		2.0		2.0		2.0	
Dilution Factor :	1.0		1.0		1.0		10.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
Chloromethane	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
Vinyl chloride	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
Bromomethane	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
Chloroethane	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
Trichlorofluoromethane	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
1,1-Dichloroethene	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
1,1,2-Trichloro-1,2,2-trifluoroetha	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
Acetone	5.0	U	5.0	U	5.0	U	50	U	5.0	U
Carbon Disulfide	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
Methyl acetate	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
ethylene chloride	0.50	U	0.50	U	0.73		7.1		0.56	
ans-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
Methyl tert-butyl ether	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
1,1-Dichloroethane	0.50	U	0.50	U	10		8.4		4.1	
cis-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
2-Butanone	5.0	U	5.0	U	5.0	U	50	U	5.0	U
Bromochloromethane	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
Chloroform	0.50	UJ	0.50	UJ	0.50	UJ	5.0	UJ	0.50	UJ
1,1,1-Trichloroethane	0.50	U	0.50	U	3.0		5.0	U	15	
Cyclohexane	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
Carbon tetrachloride	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
Benzene	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
1,2-Dichloroethane	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
Trichloroethene	0.50	U	0.50	U	110	J	80		8.5	J
Methylcyclohexane	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
1,2-Dichloropropane	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
Bromodichloromethane	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
cis-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
4-Methyl-2-pentanone	5.0	U	5.0	U	5.0	U	50	U	5.0	U
Toluene	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
trans-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
1,1,2-Trichloroethane	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U

Case #: 37367 SDG : E2PP3
Site : LANE STREET GROUND WATER CONTAMINATION
Lab. : A4
Viewer :
Date :

Sample Number :	E2PS3		E2PS4		E2PS5		E2PS5DL		E2PS6	
Sampling Location :	GW1		GW2		GW5		GW5		GW6	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	4/14/2008		4/14/2008		4/14/2008				4/14/2008	
Time Sampled :										
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :	2.0		2.0		2.0		2.0		2.0	
Dilution Factor :	1.0		1.0		1.0		10.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
2-Hexanone	5.0	U	5.0	U	5.0	U	50	U	5.0	U
Dibromochloromethane	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
1,2-Dibromoethane	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
Chlorobenzene	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
Ethylbenzene	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
o-Xylene	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
m,p-Xylene	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
Styrene	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
Bromoform	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
Isopropylbenzene	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
1,1,2,2-Tetrachloroethane	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
1,3-Dichlorobenzene	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
1,4-Dichlorobenzene	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
1,2-Dichlorobenzene	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
1,2-Dibromo-3-chloropropane	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
1,2,4-Trichlorobenzene	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U
1,2,3-Trichlorobenzene	0.50	U	0.50	U	0.50	U	5.0	U	0.50	U

Case #: 37367 SDG : E2PP3
Site : LANE STREET GROUND WATER CONTAMINATION
Lab. : A4
Viewer :
Date

Sample Number :	E2PS7		E2PS8		E2PS8MS		E2PS8MSD		E2PS9	
Sampling Location :	GW7		GW9		GW9		GW9		GW8	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	4/14/2008		4/14/2008						4/14/2008	
Time Sampled :										
%Moisture :	N/A		N/A		0		0		N/A	
pH :	2.0		2.0		2.0		2.0		2.0	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Vinyl chloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromomethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Trichlorofluoromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethene	0.50	U	0.50	U	6.0		6.0		0.50	U
1,1,2-Trichloro-1,2,2-trifluoroetha	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Acetone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Carbon Disulfide	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methyl acetate	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methylene chloride	0.56		0.50	U	0.50	U	0.50	U	0.50	U
ans-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methyl tert-butyl ether	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethane	3.8		0.50	U	0.50	U	0.50	U	0.50	U
cis-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
2-Butanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Bromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroform	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ
1,1,1-Trichloroethane	14		0.50	U	0.50	U	0.50	U	0.50	U
Cyclohexane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Carbon tetrachloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Benzene	0.50	U	0.50	U	6.1		5.8		0.50	U
1,2-Dichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Trichloroethene	7.6		0.50	U	5.6		5.3		0.50	U
Methylcyclohexane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichloropropane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromodichloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
cis-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
4-Methyl-2-pentanone	5.0	U	5.0	U	5.0	U	0.26	J	5.0	U
Toluene	0.50	U	0.50	U	5.8		5.7		0.50	U
trans-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U

Case #: 37367 SDG : E2PP3
Site : LANE STREET GROUND WATER CONTAMINATION
Lab. : A4
Viewer :
Date :

Sample Number :	E2PS7		E2PS8		E2PS8MS		E2PS8MSD		E2PS9	
Sampling Location :	GW7		GW9		GW9		GW9		GW8	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	4/14/2008		4/14/2008						4/14/2008	
Time Sampled :										
%Moisture :	N/A		N/A		0		0		N/A	
pH :	2.0		2.0		2.0		2.0		2.0	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
2-Hexanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Dibromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromoethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chlorobenzene	0.50	U	0.50	U	5.7		5.6		0.50	U
Ethylbenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
o-Xylene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
m,p-Xylene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Styrene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromoform	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Isopropylbenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2,2-Tetrachloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
3-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,4-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromo-3-chloropropane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2,4-Trichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2,3-Trichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U

Case #: 37367 SDG : E2PP3
Site : LANE STREET GROUND WATER CONTAMINATION
Lab. : A4
eviewer :
Date :

Sample Number :	E2Q13		E2Q14		E2Q66		E2Q66DL		E2Q95	
Sampling Location :	GW31		GW32		GW113		GW113		GW105	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	4/14/2008		4/14/2008		4/16/2008				4/16/2008	
Time Sampled :										
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :	2.0		2.0		2.0		2.0		2.0	
Dilution Factor :	1.0		1.0		1.0		5.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.50	U	0.50	U	0.50	U	2.5	UJ	0.50	U
Chloromethane	0.50	U	0.50	U	0.50	U	2.5	UJ	0.50	U
Vinyl chloride	0.50	U	0.50	U	0.50	U	2.5	U	0.50	U
Bromomethane	0.50	U	0.50	U	0.50	U	2.5	UJ	0.50	U
Chloroethane	0.50	U	0.50	U	0.50	U	2.5	UJ	0.50	U
Trichlorofluoromethane	0.50	U	0.50	U	0.50	U	2.5	U	0.50	U
1,1-Dichloroethene	0.50	U	0.50	U	0.50	U	2.5	U	0.50	U
1,1,2-Trichloro-1,2,2-trifluoroetha	0.50	U	0.50	U	0.50	U	2.5	U	0.50	U
Acetone	5.0	U	5.0	U	5.0	U	25	U	5.0	U
Carbon Disulfide	0.50	U	0.50	U	0.30	J	2.5	UJ	0.49	J
Methyl acetate	0.50	U	0.50	U	0.50	U	2.5	U	0.50	U
ſethylene chloride	0.50	U	0.50	U	0.50	U	2.5	U	0.50	U
,ans-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	2.5	U	0.50	U
Methyl tert-butyl ether	0.50	U	0.50	U	0.50	U	2.5	U	0.50	U
1,1-Dichloroethane	0.50	U	3.8		1.3		1.1	J	0.41	J
cis-1,2-Dichloroethene	0.50	U	0.38	J	0.50	U	2.5	U	0.50	U
2-Butanone	5.0	U	5.0	U	5.0	U	25	U	5.0	U
Bromochloromethane	0.50	U	0.50	U	0.50	U	2.5	U	0.50	U
Chloroform	0.50	UJ	0.50	UJ	0.50	UJ	2.5	UJ	0.50	UJ
1,1,1-Trichloroethane	0.50	U	0.50	U	0.50	U	2.5	U	3.0	
Cyclohexane	0.50	U	0.50	U	0.33	J	2.5	U	0.53	
Carbon tetrachloride	0.50	U	0.50	U	0.50	U	2.5	U	0.50	U
Benzene	0.50	U	0.50	U	0.50	U	2.5	U	0.61	
1,2-Dichloroethane	0.50	U	0.50	U	0.50	U	2.5	U	0.50	U
Trichloroethene	0.50	U	1.3		53	J	45		98	J
Methylcyclohexane	0.50	U	0.50	U	0.49	J	2.5	U	0.65	
1,2-Dichloropropane	0.50	U	0.50	U	0.50	U	2.5	U	0.50	U
Bromodichloromethane	0.50	U	0.50	U	0.50	U	2.5	U	0.50	U
cis-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	2.5	U	0.50	U
4-Methyl-2-pentanone	5.0	U	5.0	U	5.0	U	25	U	5.0	U
Toluene	0.50	U	0.50	U	0.71		2.5	U	1.0	
trans-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	2.5	U	0.50	U
1,1,2-Trichloroethane	0.50	U	0.50	U	0.50	U	2.5	U	0.50	U

Case #: 37367 SDG : E2PP3
Site : LANE STREET GROUND WATER CONTAMINATION
Lab. : A4
viewer :
Date :

Sample Number :	E2Q13		E2Q14		E2Q66		E2Q66DL		E2Q95	
Sampling Location :	GW31		GW32		GW113		GW113		GW105	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	4/14/2008		4/14/2008		4/16/2008				4/16/2008	
Time Sampled :										
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :	2.0		2.0		2.0		2.0		2.0	
Dilution Factor :	1.0		1.0		1.0		5.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.50	U	0.50	U	0.50	U	2.5	U	0.50	U
2-Hexanone	5.0	U	5.0	U	5.0	U	25	U	5.0	U
Dibromochloromethane	0.50	U	0.50	U	0.50	U	2.5	U	0.50	U
1,2-Dibromoethane	0.50	U	0.50	U	0.50	U	2.5	U	0.50	U
Chlorobenzene	0.50	U	0.50	U	0.50	U	2.5	U	0.50	U
Ethylbenzene	0.50	U	0.50	U	0.15	J	2.5	U	0.22	J
o-Xylene	0.50	U	0.50	U	0.50	U	2.5	U	0.50	U
m,p-Xylene	0.50	U	0.50	U	0.23	J	2.5	U	0.29	J
Styrene	0.50	U	0.50	U	0.50	U	2.5	U	0.50	U
Bromoform	0.50	U	0.50	U	0.50	U	2.5	U	0.50	U
Isopropylbenzene	0.50	U	0.50	U	0.50	U	2.5	U	0.50	U
1,2,2-Tetrachloroethane	0.50	U	0.50	U	0.50	U	2.5	U	0.50	U
1,3-Dichlorobenzene	0.50	U	0.50	U	0.50	U	2.5	U	0.50	U
1,4-Dichlorobenzene	0.50	U	0.50	U	0.50	U	2.5	U	0.50	U
1,2-Dichlorobenzene	0.50	U	0.50	U	0.50	U	2.5	U	0.50	U
1,2-Dibromo-3-chloropropane	0.50	U	0.50	U	0.50	U	2.5	U	0.50	U
1,2,4-Trichlorobenzene	0.50	U	0.50	U	0.50	U	2.5	UJ	0.50	U
1,2,3-Trichlorobenzene	0.50	U	0.50	U	0.50	U	2.5	UJ	0.50	U

Case #: 37367 SDG : E2PP3
Site : LANE STREET GROUND WATER CONTAMINATION
Lab. : A4
viewer :
Date :

Sample Number :	E2Q95DL		E2Q96		E2Q97		VBLK01		VBLK70	
Sampling Location :	GW105		GW109		GW108					
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :			4/16/2008		4/16/2008					
Time Sampled :										
%Moisture :	N/A		N/A		N/A		0		0	
pH :	2.0		2.0		2.0					
Dilution Factor :	10.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloromethane	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Vinyl chloride	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromomethane	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroethane	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Trichlorofluoromethane	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethene	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloro-1,2,2-trifluoroetha	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Acetone	50	U	5.0	U	5.0	U	5.0	U	5.0	U
Carbon Disulfide	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Methyl acetate	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
ethylene chloride	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
,uns-1,2-Dichloroethene	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Methyl tert-butyl ether	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethane	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
cis-1,2-Dichloroethene	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
2-Butanone	50	U	5.0	U	5.0	U	5.0	U	5.0	U
Bromochloromethane	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroform	5.0	UJ	0.50	UJ	5.6	J	0.50	U	0.50	UJ
1,1,1-Trichloroethane	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Cyclohexane	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Carbon tetrachloride	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Benzene	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichloroethane	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Trichloroethene	110		0.50	U	0.50	U	0.50	U	0.50	U
Methylcyclohexane	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichloropropane	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromodichloromethane	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
cis-1,3-Dichloropropene	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
4-Methyl-2-pentanone	50	U	5.0	U	5.0	U	5.0	U	5.0	U
Toluene	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
trans-1,3-Dichloropropene	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloroethane	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U

Case #: 37367 SDG : E2PP3
Site : LANE STREET GROUND WATER CONTAMINATION
Lab. : A4
Reviewer :
Date :

Sample Number :	E2Q95DL		E2Q96		E2Q97		VBLK01		VBLK70	
Sampling Location :	GW105		GW109		GW108					
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :			4/16/2008		4/16/2008					
Time Sampled :										
%Moisture :	N/A		N/A		N/A		0		0	
pH :	2.0		2.0		2.0					
Dilution Factor :	10.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
2-Hexanone	50	U	5.0	U	5.0	U	5.0	U	5.0	U
Dibromochloromethane	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromoethane	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Chlorobenzene	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Ethylbenzene	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
o-Xylene	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
m,p-Xylene	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Styrene	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromoform	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Isopropylbenzene	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2,2-Tetrachloroethane	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
3-Dichlorobenzene	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
1,4-Dichlorobenzene	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichlorobenzene	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromo-3-chloropropane	5.0	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2,4-Trichlorobenzene	5.0	UJ	0.50	U	0.50	U	0.50	U	0.50	U
1,2,3-Trichlorobenzene	5.0	UJ	0.50	U	0.50	U	0.50	U	0.50	U

Case #: 37367 SDG : E2PP3
Site : LANE STREET GROUND WATER CONTAMINATION
Lab. : A4
eviewer :
Date :

Sample Number :	VBLK73		VBLK76		VBLK79		VHBLK01			
Sampling Location :										
Matrix :	Water		Water		Water		Water			
Units :	ug/L		ug/L		ug/L		ug/L			
Date Sampled :										
Time Sampled :										
%Moisture :	0		0		0		N/A			
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0			
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.50	U	0.50	U	0.50	U	0.50	U		
Chloromethane	0.50	U	0.50	U	0.50	U	0.50	U		
Vinyl chloride	0.50	U	0.50	U	0.50	U	0.50	U		
Bromomethane	0.50	U	0.50	U	0.50	U	0.50	U		
Chloroethane	0.50	U	0.50	U	0.50	U	0.50	U		
Trichlorofluoromethane	0.50	U	0.50	U	0.50	U	0.50	U		
1,1-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U		
1,1,2-Trichloro-1,2,2-trifluoroetha	0.50	U	0.50	U	0.50	U	0.50	U		
Acetone	5.0	U	5.0	U	5.0	U	5.0	U		
Carbon Disulfide	0.50	U	0.50	U	0.50	U	0.50	U		
Methyl acetate	0.50	U	0.50	U	0.50	U	0.50	U		
Methylene chloride	0.50	U	0.29	J	0.43	J	0.50	U		
rans-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U		
Methyl tert-butyl ether	0.50	U	0.50	U	0.50	U	0.50	U		
1,1-Dichloroethane	0.50	U	0.50	U	0.50	U	0.50	U		
cis-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U		
2-Butanone	5.0	U	5.0	U	5.0	U	5.0	U		
Bromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U		
Chloroform	0.50	UJ	0.50	UJ	0.50	UJ	0.50	U		
1,1,1-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U		
Cyclohexane	0.50	U	0.50	U	0.50	U	0.50	U		
Carbon tetrachloride	0.50	U	0.50	U	0.50	U	0.50	U		
Benzene	0.50	U	0.50	U	0.50	U	0.50	U		
1,2-Dichloroethane	0.50	U	0.50	U	0.50	U	0.50	U		
Trichloroethene	0.50	U	0.50	U	0.50	U	0.50	U		
Methylcyclohexane	0.50	U	0.50	U	0.50	U	0.50	U		
1,2-Dichloropropane	0.50	U	0.50	U	0.50	U	0.50	U		
Bromodichloromethane	0.50	U	0.50	U	0.50	U	0.50	U		
cis-1 3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U		
4-Methyl-2-pentanone	5.0	U	5.0	U	5.0	U	5.0	U		
Toluene	0.50	U	0.50	U	0.50	U	0.50	U		
trans-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U		
1,1,2-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U		

Case #: 37367 SDG : E2PP3
Site : LANE STREET GROUND WATER CONTAMINATION
Lab. : A4
Reviewer :
Date :

Sample Number :	VBLK73		VBLK76		VBLK79		VHBLK01			
Sampling Location :										
Matrix :	Water		Water		Water		Water			
Units :	ug/L		ug/L		ug/L		ug/L			
Date Sampled :										
Time Sampled :										
%Moisture :	0		0		0		N/A			
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0			
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.50	U	0.50	U	0.50	U	0.50	U		
2-Hexanone	5.0	U	5.0	U	5.0	U	5.0	U		
Dibromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U		
1,2-Dibromoethane	0.50	U	0.50	U	0.50	U	0.50	U		
Chlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U		
Ethylbenzene	0.50	U	0.50	U	0.50	U	0.50	U		
o-Xylene	0.50	U	0.50	U	0.50	U	0.50	U		
m,p-Xylene	0.50	U	0.50	U	0.50	U	0.50	U		
Styrene	0.50	U	0.50	U	0.50	U	0.50	U		
Bromoform	0.50	U	0.50	U	0.50	U	0.50	U		
Isopropylbenzene	0.50	U	0.50	U	0.50	U	0.50	U		
1,2,2-Tetrachloroethane	0.50	U	0.50	U	0.50	U	0.50	U		
1,3-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U		
1,4-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U		
1,2-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U		
1,2-Dibromo-3-chloropropane	0.50	U	0.50	U	0.50	U	0.50	U		
1,2,4-Trichlorobenzene	0.50	U	0.50	U	0.50	UJ	0.50	U		
1,2,3-Trichlorobenzene	0.50	U	0.50	U	0.50	UJ	0.50	U		

National Functional Guideline Report # 9 Fri, May 9, 2008

Lab A4 (A4 Scientific) SDG E2PP3 Case 37367 Contract EPW05036 Region 5 DDTID 58763 SOW SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2PR3 Location=GW3 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
000556-67-2	Cyclotetrasiloxane, octamet..	12.3	0.60	ug/L	JN

National Functional Guideli... Report # 9 ...01 Fri, May 9, 2008

Lab A4 (A4 Scientific) SDG E2PP3 Case 37367 Contract EPW05036 Region 5 DDTID 58763 SOW SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2PR4 Location=GW4 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
000556-67-2	Cyclotetrasiloxane, octamet..	12.3	0.64	ug/L	JN

National Functional Guidelines Report # 9

Lab A4 (A4 Scientific) SDG E2PP3 Case 37367 Contract EPW05036 Region 5 DDTID 58763 SOW SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2PR5 Location=GW10 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
Unknown-01	Unknown-01	12.3	0.75	ug/L	J

National Functional Guidelin[illegible]Report # 9 [illegible] Fri, May 9, 2008

Lab A4 (A4 Scientific) SDG E2PP3 Case 37367 Contract EPW05036 Region 5 DDTID 58763 SOW SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2PR6 Location=GW11 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
000556-67-2	Cyclotetrasiloxane, octamet..	12.3	1.0	ug/L	JN

Lab A4 (A4 Scientific) SDG E2PP3 Case 37367 Contract EPW05036 Region 5 DDTID 58763 SOW SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2PS4 Location=GW2 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
Unknown-01	Unknown-01	1.72	470	ug/L	J
Unknown-02	Unknown-02	7.87	2.7		J

National Functional Guideline Report # 9

Lab A4 (A4 Scientific) SDG E2PP3 Case 37367 Contract EPW05036 Region 5 DDTID 58763 SOW SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2PS5 Location=GW5 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
Unknown-01	Unknown-01	1.72	480	ug/L	J
Unknown-02	Unknown-02	7.87	2.8		J
000556-67-2	Cyclotetrasiloxane, octamet..	12.3	0.74		JN

National Functional Guidelin[illegible]eport # 9 [illegible] Fri, May 9, 2008

Lab A4 (A4 Scientific) SDG E2PP3 Case 37367 Contract EPW05036 Region 5 DDTID 58763 SOW SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2PS5DL Location=No_TR_data Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
Unknown-01	Unknown-01	1.72	4600	ug/L	JD
Unknown-02	Unknown-02	7.87	28		JD

National Functional Guidelines Report # 9

Lab A4 (A4 Scientific) SDG E2PP3 Case 37367 Contract EPW05036 Region 5 DDTID 58763 SOW SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2PS6 Location=GW6 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
Unknown-01	Unknown-01	1.72	570	ug/L	J
Unknown-02	Unknown-02	7.87	2.8		J
Unknown-03	Unknown-03	8.97	0.52		J
000556-67-2	Cyclotetrasiloxane, octamet...	12.3	1.7		JN

National Functional Guidelines Report # 9 Fri, May 9, 2008

Lab A4 (A4 Scientific) SDG E2PP3 Case 37367 Contract EPW05036 Region 5 DDTID 58763 SOW SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2PS7 Location=GW7 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
Unknown-01	Unknown-01	1.72	540	ug/L	J
Unknown-02	Unknown-02	7.87	2.7		J
000556-67-2	Cyclotetrasiloxane, octamet..	12.3	0.65		JN

Lab A4 (A4 Scientific) **SDG** E2PP3 **Case** 37367 **Contract** EPW05036 **Region** 5 **DDTID** 58763 **SOW** SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2PS8 Location=GW9 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
Unknown-01	Unknown-01	7.87	2.7	ug/L	J

Lab A4 (A4 Scientific) SDG E2PP3 Case 37367 Contract EPW05036 Region 5 DDTID 58763 SOW SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2PS9 Location=GW8 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
Unknown-01	Unknown-01	1.72	530	ug/L	J
Unknown-02	Unknown-02	7.87	2.6		J

Lab A4 (A4 Scientific) **SDG** E2PP3 **Case** 37367 **Contract** EPW05036 **Region** 5 **DDTID** 58763 **SOW** SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2Q13 Location=GW31 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
Unknown-01	Unknown-01	1.72	500	ug/L	J
Unknown-02	Unknown-02	7.87	3.0		J
000556-67-2	Cyclotetrasiloxane, octamet..	12.3	0.85		JN

Lab A4 (A4 Scientific) **SDG** E2PP3 **Case** 37367 **Contract** EPW05036 **Region** 5 **DDTID** 58763 **SOW** SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2Q14 Location=GW32 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
Unknown-01	Unknown-01	1.72	520	ug/L	J
Unknown-02	Unknown-02	7.87	2.8		J

Lab A4 (A4 Scientific) SDG E2PP3 Case 37367 **Contract** EPW05036 **Region** 5 **DDTID** 58763 **SOW** SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2Q66 Location=GW113 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration	Lab Qualifier
E966796	Total Alkane TICs		7.3	ug/L J
E966796	Total Alkane TICs		7.3	
Unknown-02	Unknown-02	4.05	0.54	J
Unknown-01	Unknown-01	5.59	0.53	J
000556-67-2	Cyclotetrasiloxane, octamet..	12.3	0.60	JN

National Functional Guideline Report # 9

Lab A4 (A4 Scientific) SDG E2PP3 Case 37367 Contract EPW05036 Region 5 DDTID 58763 SOW SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2Q95 Location=GW105 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
E966796	Total Alkane TICs	11		ug/L	J
E966796	Total Alkane TICs	11			

Lab A4 (A4 Scientific) **SDG** E2PP3 **Case** 37367 **Contract** EPW05036 **Region** 5 **DDTID** 58763 **SOW** SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2Q95DL Location=No_TR_data Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
E966796	Total Alkane TICs		5.6	ug/L	
E966796	Total Alkane TICs		5.6		JD

Lab A4 (A4 Scientific) **SDG** E2PP3 **Case** 37367 **Contract** EPW05036 **Region** 5 **DDTID** 58763 **SOW** SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2Q96 Location=GW109 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
E966796	Total Alkane TICs	.	0.82	ug/L	J
E966796	Total Alkane TICs	.	0.82		
000556-67-2	Cyclotetrasiloxane, octamet..	12.3	0.86		JN

Lab A4 (A4 Scientific) **SDG** E2PP3 **Case** 37367 **Contract** EPW05036 **Region** 5 **DDTID** 58763 **SOW** SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2Q97 Location=GW108 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
E966796	Total Alkane TICs		0.89	ug/L	
E966796	Total Alkane TICs		0.89		J
000556-67-2	Cyclotetrasiloxane, octamet..	12.31	2.1		JN

Regional Transmittal Form

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE:

SUBJECT: Review of Data
Received for Review on 8 May 08

FROM: Stephen L. Ostrodka, Chief (SRT-4J)
Superfund Field Services Section

TO: Data User: IDEM

We have reviewed the data for the following case:

SITE NAME: LANE Street GW Contamination (TN)

CASE NUMBER: 37367 SDG NUMBER: E2PP3

Number and Type of Samples: 18 Water samples

Sample Numbers: E2PP3; R3-R6; S3-S9; Q13-Q14; Q66; Q95-Q97

Laboratory: AFS Scientific Hrs for Review:

Following are our findings:

: Howard Pham
Region 5 TPO
Mail Code: SRT-4J

SAMPLE DELIVERY GROUP (SDG)
COVER SHEET

SDG Number:	E2PP3 - Revised		
Laboratory Name:	A4 SCIENTIFIC, INC.	**Laboratory Code:**	A4
Contract No.:	EPW05036	**Case No.:**	37367
Analysis Price:	$416.00	**SDG Turnaround:**	21 days

Modified Analysis (if applicable):

Modification Reference No.: _____

EPA Sample Numbers in SDG (Listed in Numerical Order)

1) E2PP3	7) E2PS4	13) E2Q13	19)
2) E2PR3	8) E2PS5	14) E2Q14	20)
3) E2PR4	9) E2PS6	15) E2Q66	21)
4) E2PR5	10) E2PS7	16) E2Q95	22)
5) E2PR6	11) E2PS8	17) E2Q96	23)
6) E2PS3	12) E2PS9	18) E2Q97	24)

E2PP3	E2Q97
First Sample in SDG	Last Sample in SDG
04/15/2008	04/17/2008
First Sample Receipt Date	Last Sample Receipt Date

*Note: There are a maximum of 20 **field** samples [excluding Performance Evaluation (PE) Samples] in an SDG. Attach the TR/COC Records to this form in alphanumeric order (the order listed above on this form).*

Jessica Schultz
Signature

4/17/08
Date

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 37367
DAS No:
SDG No: E2PP3

L

Date Shipped:	4/14/2008
Carrier Name:	FedEx
Airbill:	811417071866
Shipped to:	A4 Scientific, Inc. 1544 Sawdust Road Suite 505 The Woodlands TX 77380 (281) 292-5277

Chain of Custody Record

Relinquished By	(Date / Time)	Received By	(Date / Time)
1	4-14-08 / 9:15PM		
2			
3			
4		J. Schultz	4/15/08 10:00

Sampler Signature:

For Lab Use Only 4/15/08

Lab Contract No: EPW065036
Unit Price: 0
Transfer To:
Lab Contract No:
Unit Price: 0 4/15/08

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
E2PP3	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C99866 (HCL) (1)	GW12	S: 4/14/2008	11:00	0008921-01	Intact
E2PR3	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C99853 (HCL) (1)	GW3	S: 4/14/2008	13:00	-02	
E2PR4	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099854 (HCL) (1)	GW4	S: 4/14/2008	13:50	-03	
E2PR5	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C99862 (HCL) (1)	GW10	S: 4/14/2008	14:55	-04	
E2PR6	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C99863 (HCL) (1)	GW11	S: 4/14/2008	15:40	-05	
E2PS3	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099851 (HCL) (1)	GW1	S: 4/14/2008	13:35	-06	
E2PS4	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C99852 (HCL) (1)	GW2	S: 4/14/2008	12:50	-07	
E2PS5	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099855 (HCL) (1)	GW5	S: 4/14/2008	13:33	-08	
E2PS6	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099856 (HCL) (1)	GW6	S: 4/14/2008	14:02	-09	
E2PS7	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099857 (HCL) (1)	GW7	S: 4/14/2008	14:02	-10	

2021

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: E2PS8	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 5°C	Chain of Custody Seal Number: 23650 23651
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? Y / Shipment Iced? Y

CLP TVOA = CLP TCL Trace Volatiles, CLP VOA = CLP TCL Volatiles

TR Number: 5-551068049-010188-0002

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 37367
DAS No:
SDG No: E2PP3

L

Date Shipped:	4/14/2008
Carrier Name:	FedEx
Airbill:	811417071866
Shipped to:	A4 Scientific, Inc. 1544 Sawdust Road Suite 505 The Woodlands TX 77380 (281) 292-5277

Chain of Custody Record

Relinquished By	(Date / Time)	Received By	(Date / Time)
1 [signature]	4-14-08 4:15pm		
2			
3			
4		J. Schultz	4/15/08 10:00

Sampler Signature:

For Lab Use Only

Lab Contract No: EPW05036
Unit Price: 0
Transfer To: 2
Lab Contract No:
Unit Price: 23 4/15/08

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
E2PS8	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C99858 (HCL), 5C99860 (HCL), 5C99861 (HCL) (3)	GW9	S: 4/15/2008	14:56	0008921-11	Intact
E2PS9	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099859 (HCL) (1)	GW8	S: 4/14/2008	14:25	-12	↓
E2Q03	Soil (>12")/ Mark Jaworski	L/G	CLP VOA (21)	5C99864 (Ice Only) (1)	SS1	S: 4/14/2008	15:45	0008922-01	↓

ORIGINAL COPY

Case: 37367 SDG: E2PP3

Episode: 8921 Int./Date: 23 4/15/08

202A

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: E2PS8	Additional Sampler Signature(s): DC Ken Smith	Cooler Temperature Upon Receipt: 5°C	Chain of Custody Seal Number: 23650 23651
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? Y Shipment Iced? Y

CLP TVOA = CLP TCL Trace Volatiles, CLP VOA = CLP TCL Volatiles

TR Number: 5-551068049-010188-0002

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 37367
DAS No:
SDG No: E2PP3

L

Date Shipped:	4/14/2008
Carrier Name:	FedEx
Airbill:	811417071877
Shipped to:	A4 Scientific, Inc. 1544 Sawdust Road Suite 505 The Woodlands TX 77380 (281) 292-5277

Chain of Custody Record

Relinquished By	(Date / Time)	Received By	(Date / Time)
1	4-14-08 8:15 PM		
2			
3			
4		J. Dohnalyk	4/15/08 10:00

Sampler Signature:

For Lab Use Only

Lab Contract No: EPW05036
Unit Price: 0
Transfer To:
Lab Contract No:
Unit Price: 35 4/15/08

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
E2Q13	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099885 (HCL) (1)	GW31	S: 4/14/2008	18:15	0008921-13	Intact
E2Q14	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099886 (HCL) (1)	GW32	S: 4/14/2008	19:10	-14 Final SDG SX	

203

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: E2PP7	Additional Sampler Signature(s): Ken M Spitz	Cooler Temperature Upon Receipt: 4°C	Chain of Custody Seal Number: 23648 23649
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? Y Shipment Iced? Y

CLP TVOA = CLP TCL Trace Volatiles

TR Number: 5-551068049-010188-0003

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 37367
DAS No:
SDG No: F2PP3

L

Date Shipped:	4/16/2008
Carrier Name:	FedEx
Airbill:	811417052850
Shipped to:	A4 Scientific, Inc. 1544 Sawdust Road Suite 505 The Woodlands TX 77380 (281) 292-5277

Chain of Custody Record

	Relinquished By	(Date / Time)	Received By	(Date / Time)
1	[illegible]	4-16-08/8:00AM		
2				
3				
4			J. Schultz	4/17/08 10:00

Sampler Signature:

For Lab Use Only

Lab Contract No: EPW05036
Unit Price: 0
Transfer To:
Lab Contract No:
Unit Price: 4/17/08

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
E2Q95	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C244822 (HCL) (1)	GW105	S: 4/16/2008	16:10	000 8950-01	Intact
E2Q96	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099903 (HCL) (1)	GW109	S: 4/16/2008	17:30	-02	
E2Q97	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099902 (HCL) (1)	GW108	S: 4/16/2008	8:30	-03	

ORIGINAL COPY

Case: 37367 SDG:

Episode: 8950 Int./Date: 4/17/08

204

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 5°C	Chain of Custody Seal Number: 27900 23697
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? Y / Shipment Iced? Y

CLP TVOA = CLP TCL Trace Volatiles

TR Number: 5-551068049-041708-0002

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 37367
DAS No:
SDG No: E2PP3

L

Date Shipped:	4/16/2008
Carrier Name:	FedEx
Airbill:	811417052920
Shipped to:	A4 Scientific, Inc. 1544 Sawdust Road Suite 505 The Woodlands TX 77380 (281) 292-5277

Chain of Custody Record

	Relinquished By	(Date / Time)	Received By	(Date / Time)
1	[illegible]	4-16-8/8:00		
2				
3				10:00
4			J. Schultz	4/17/08

Sampler Signature:

For Lab Use Only

Lab Contract No: EPW05036
Unit Price: 8
Transfer To:
Lab Contract No:
Unit Price: 88 4/17/08

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
E2Q66	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099907 (HCL) (1)	GW113	S: 4/16/2008	16:35	000 8950-04	Intact

Final sdg 4K

ORIGINAL COPY

Case: _____ SDG: _____

Episode: _____ Int /Date:

205

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
				27900, 23687

Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? __	Shipment Iced? __

CLP TVOA = CLP TCL Trace Volatiles

TR Number: 5-551068049-041708-0003

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4802

A4 SCIENTIFIC, INC.
1544 Sawdust Road, Suite505•The Woodlands, TX 77380•Phone (281) 292-5277

Contract #: EPW05036	Case #: 37367	SDG #: E2PP3

SDG NARRATIVE

SAMPLE RECEIPT & LOGIN

The following samples were received on the dates listed against them. The samples were logged in for analysis as listed.

EPA SAMPLE #	LAB SAMPLE #	DATE/TIME RECEIVED	AIRBILL NO.	ANALYSIS	Total # of Containers Received	MATRIX	REMARKS
E2PP3	0008921-01	04/15/08 10:00	811417071877	TVOA	3	WATER	
E2PR3	0008921-02	04/15/08 10:00	811417071877	TVOA	3	WATER	
E2PR4	0008921-03	04/15/08 10:00	811417071877	TVOA	3	WATER	
E2PR5	0008921-04	04/15/08 10:00	811417071877	TVOA	3	WATER	
E2PR6	0008921-05	04/15/08 10:00	811417071877	TVOA	3	WATER	
E2PS3	0008921-06	04/15/08 10:00	811417071877	TVOA	3	WATER	
E2PS4	0008921-07	04/15/08 10:00	811417071877	TVOA	3	WATER	
E2PS5	0008921-08	04/15/08 10:00	811417071877	TVOA	3	WATER	
E2PS6	0008921-09	04/15/08 10:00	811417071877	TVOA	3	WATER	
E2PS7	0008921-10	04/15/08 10:00	811417071877	TVOA	3	WATER	
E2PS8	0008921-11	04/15/08 10:00	811417071877	TVOA	9	WATER	MS/MSD
E2PS9	0008921-12	04/15/08 10:00	811417071877	TVOA	3	WATER	
E2Q03	0008921-13	04/15/08 10:00	811417071866	TVOA	3	WATER	
E2Q13	0008921-13	04/15/08 10:00	811417071866	TVOA	3	WATER	
E2Q14	0008921-14	04/15/08 10:00	811417071866	TVOA	3	WATER	
E2Q95	0008950-01	04/15/08 10:00	811417052850	TVOA	3	WATER	
E2Q96	0008950-02	04/15/08 10:00	811417052850	TVOA	3	WATER	
E2Q97	0008950-03	04/15/08 10:00	811417052850	TVOA	3	WATER	
E2Q66	0008950-04	04/15/08 10:00	811417052850	TVOA	3	WATER	

TVOA=CLP TCL Trace Volatiles

The cooler temperatures are listed against the coolers.

DATE RECEIVED	COOLER NO.	Temp (in °C)
04/15/2008	1	5
04/15/2008	2	4
04/17/2008	1	5

The following issues were encountered during sample receiving/login,

Issue: The TR/COC listed the sample collection date and time for sample E2PS8 as 4/15/08 at 14:56; however the lab received the samples on 4/15/08 at 10:00 AM.
Resolution: Per Region 5, the laboratory has noted the correct collection date as 4/14/08 and the correct collection time as 14:56 and proceeded with the analysis of the sample.

Directive (email) is enclosed. No other discrepancies or issues were noted during sample receipt and login.

VOLATILES TRACE

Samples were analyzed using instrument **C-5973 and F-5973**.

A4 SCIENTIFIC, INC.
1544 Sawdust Road, Suite505•The Woodlands, TX 77380•Phone (281) 292-5277

Contract #: EPW05036	Case #: 37367	SDG #: E2PP3

Instrument C-5973 consisted of an Agilent 5973 GC/MS with a 25-meter long DB-624 (Agilent cat#128-1324) column having a 0.2mm ID and 1.12µm film thickness, OI Purge and Trap Model 4560 with an Archon auto sampler. The trap used was a #10 trap (OI Cat# 228122) having an approximate composition of 40% Tenax, 30% Silica gel and 30% CMS.

Instrument F-5973 consisted of an Agilent 5973 GC/MS with a 25-meter long DB-624 (Agilent cat#128-1324) column having a 0.2mm ID and 1.12µm film thickness, OI Purge and Trap Model 4560 with an Archon auto sampler. The trap used was a #10 trap (OI Cat# 228122) having an approximate composition of 40% Tenax, 30% Silica gel and 30% CMS.

All VOA samples had the pH characteristics verified. The reading is listed below.

EPA SAMPLE #	LAB SAMPLE #	pH
E2PP3	0008921-01	≤ 2
E2PR3	0008921-02	≤ 2
E2PR4	0008921-03	≤ 2
E2PR5	0008921-04	≤ 2
E2PR6	0008921-05	≤ 2
E2PS3	0008921-06	≤ 2
E2PS4	0008921-07	≤ 2
E2PS5	0008921-08	≤ 2
E2PS6	0008921-09	≤ 2
E2PS7	0008921-10	≤ 2
E2PS8	0008921-11	≤ 2
E2PS9	0008921-12	≤ 2
E2Q03	0008921-13	≤ 2
E2Q13	0008921-13	≤ 2
E2Q14	0008921-14	≤ 2
E2Q95	0008950-01	≤ 2
E2Q96	0008950-02	≤ 2
E2Q97	0008950-03	≤ 2
E2Q66	0008950-04	≤ 2

MS/MSD was performed on sample E2PS8. Recoveries were noted to be within control limits.

The following samples were run at dilution, listed against them to get all the compounds within range.

EPA SAMPLE ID	DILUTION
E2PS5	10
E2Q66	5
E2Q95	10

Manual integrations were performed for the following samples for the compounds listed against them.

VSTD02060 – Chloroethane-d5
VSTD00560 – Chloroethane-d5
VSTD0.586 – Chloroethane
VSTD0.586 – Chloroethane-d5
VSTD00502 – 1,1,2-Trichloro-1,2,2-trif

These manual integrations were necessary because the software failed to accurately integrate the entire peak. In all the above instances, the quantitation reports are flagged with "m". A hard copy printout of the manual integration, the scan ranges, and initials of the analyst or manager is included in the data package.

A4 SCIENTIFIC, INC.
1544 Sawdust Road, Suite505•The Woodlands, TX 77380•Phone (281) 292-5277

Contract #: EPW05036	Case #: 37367	SDG #: E2PP3

No issues were encountered during sample analysis.

The following equations were used for calculation of the sample results from raw instrument output data:

VOLATILES

Water (Low/Med, Trace & SIM):

$$\text{Concentration } (\mu g/L) = \frac{(Ax)(Is)(Df)}{(Ais)(\overline{RRF})(Vo)}$$

A_x = Area of the characteristic ion (EICP) for the compound to be measured.
A_{is} = Area of the characteristic ion (EICP) for the internal standard.
I_s = Amount of internal standard added in nanograms (ng).

$\overline{RRF}$ = Mean relative response factor from the initial calibration.
V_o = Total volume of water purged, in milliliters (mL).
Df = Dilution factor.

I certify that this Sample Data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy Sample Data Package and in the electronic data deliverable has been authorized by the laboratory Manager or Manager's designee, as verified by the following signature.

Ready Patents / Lab Mgr
Signature and Title

5/7/08
Date of Signature

pradeep@a4scientific.com

›m: "jewell, jesse" <jjewell3@fedcsc.com>
·o: <jschulze@a4scientific.com>; "NEHA" <neha@a4scientific.com>; <pradeep@a4scientific.com>; "pakanati" <pakanati@a4scientific.com>
Cc: <mjaworsk@idem.in.gov>; "Carlene Thomas" <thomas.carlene@epa.gov>; "Howard Pham" <pham.howard@epa.gov>; "Warren Layne" <layne.warren@epa.gov>
Sent: Friday, April 18, 2008 4:27 PM
Attach: 37367-TRCOC.pdf
Subject: Region 05 | Case 37367 | Lab A4 | SDG E2PP3 | Issue Discrepancies with tags, jars, and/or TR/COC | FINAL

Jessica,

Summary Start
Issue: The TR/COC lists the sample collection date and time for sample E2PS8 as 4/15/08 at 14:56; however the lab received the samples on 4/15/08 at 10:00 AM.
Resolution: Per Region 5, the laboratory shall note the correct collection date as 4/14/08 and the correct collection time as 14:56 in the SDG Narrative and proceed with the analysis of the sample.
Summary End

Please let me know if you have any questions or problems.

Thanks,

Jesse

Jesse Jewell
Environmental Coordinator
'ions 4 & 5
vell3@fedcsc.com
Computer Sciences Corporation
1-703-818-4184

4/18/08 6:10 PM Phone conversation between Mark Jaworski, Indiana DEM, and Jesse Jewell, SMO. Mark said the correct collection time for sample E2PS8 is 14:56.

-----Original Message-----
From: Layne.Warren@epamail.epa.gov [mailto:Layne.Warren@epamail.epa.gov]
Sent: Friday, April 18, 2008 3:43 PM
To: jewell, jesse
Subject: Re: Region 05 | Case 37367 | Lab A4 | SDG E2PP3 | Issue Discrepancies with tags, jars, and/or TR/COC

Please ask the sampler what time the sample was collected and report both numbers to the lab and tell them to note this in the SDG narrative.

Thanks.

'ren W. Layne, Ph.D.
nist, QAPP Reviewer, RSCC, & Region 5 Nanotechnology Expert
USEPA Region 5, Superfund Division, I STB, FSS
Mail Code: SR-4J, 77 W. Jackson Boulevard
Chicago, IL 60604-3590
Tel: 312-886-7336, FAX: 312-353-9281

209

"jewell, jesse"
<jjewell3@fedcsc
.com>

04/18/2008 01:29 PM

To
Carlene Thomas/R5/USEPA/US@EPA,
Howard Pham/R5/USEPA/US@EPA,
Warren Layne/R5/USEPA/US@EPA

cc

Subject
Region 05 | Case 37367 | Lab A4 |
SDG E2PP3 | Issue Discrepancies
with tags, jars, and/or TR/COC

Warren,

... is reporting the following issue for Case 37367. Please advise if the samplers proposed resolution is acceptable to the Region.

Issue: The TR/COC lists the sample collection date and time for sample E2PS8 as 4/15/08 at 14:56; however the lab received the samples on 4/15/08 at 10:00 AM.

Proposed Resolution: The sample collection date should be 4/14/08.

Please let me know if you need any additional information.

Thanks,

Jesse

Jesse Jewell
Environmental Coordinator
Regions 4 & 5
JJewell3@fedcsc.com
Computer Sciences Corporation
1-703-818-4184

4/18/08 2:20 PM Phone conversation between Mark Jaworski, Indiana DEM, and Jesse Jewell, SMO. Mark said the collection date for sample E2PS8 should be 4/14/08.

r: jewell, jesse
nt: Wednesday, April 16, 2008 12:05 PM
To: 'mjaworsk@idem.in.gov'
Cc: 'Carlene Thomas'; 'Howard Pham'; 'Warren Layne'
Subject: Region 05 | Case 37367 | Lab A4 | SDG E2PP3 | Issue Discrepancies with tags, jars, and/or TR/COC

Mark,

A4 is reporting the following issue with Case 37367. Please advise how the laboratory should proceed.

Issue: The TR/COC lists the sample collection date and time for sample E2PS8 as 4/15/08 at 14:56; however the lab received the samples on 4/15/08 at 10:00 AM.

Please let me know if you need any additional information.

Thanks,

Jesse

Jesse Jewell
Environmental Coordinator
Regions 4 & 5
JJewell3@fedcsc.com
puter Sciences Corporation
3-818-4184

From: jschulze@a4scientific.com [mailto:jschulze@a4scientific.com]
Sent: Wednesday, April 16, 2008 12:27 PM
To: jewell, jesse
Cc: pradeep@a4scientific.com; pakanati; NEHA
Subject: CASE/SDG E2PP3

Jesse,

Lab received water samples on 4/15/2008.

Issue: Per TR/COC sample E2PS8 sample collect date/time is 4/15/2008 @ 14:56. Lab received samples on 4/15/2008 @ 10am. Please see attached TR/COC.

has had problems with receipt of emails, Please confirm if you ve.
Please let me know if you have any questions.
Thanks.

Jessica Schulze

A4 Scientific Inc.
1544 Sawdust Rd. Suite 505
The Woodlands, Texas 77380
(281) 292-5277(See attached file: 37367-TRCOC.pdf)

2A - FORM II VOA-1
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: _____ SDG No.: E2PP3

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC1 (VCL) #	VDMC2 (CLA) #	VDMC3 (DCE) #	VDMC4 (BUT) #	VDMC5 (CLF) #	VDMC6 (DCA) #	VDMC7 (BEN) #
01	E2PP3	92	115	78	120	112	115	105
02	E2PR3	93	115	76	117	106	117	102
03	E2PR4	65	115	79	126	107	118	104
04	E2PR5	96	122	79	109	109	113	113
05	E2PR6	95	114	78	120	108	120	105
06	E2PS3	70	91	63	88	87	85	90
07	E2PS4	82	102	71	84	88	89	93
08	E2PS5	81	98	72	88	86	91	91
09	E2PS5DL	78	93	67	93	88	96	87
10	E2PS6	86	101	72	93	91	96	94
11	E2PS7	79	94	70	87	88	95	91
12	E2PS8	83	99	70	91	87	94	94
13	E2PS8MS	79	97	93	81	85	88	92
14	E2PS8MSD	80	95	93	93	88	91	89
15	E2PS9	79	97	68	88	88	90	91
16	E2Q13	79	98	68	102	90	101	90
17	E2Q14	80	96	70	92	92	97	90
18	E2Q66	71	86	61	104	85	96	90
19	E2Q66DL	83	26 *	69	86	87	93	90
20	E2Q95	68	84	61	91	80	84	89
21	E2Q95DL	78	92	62	89	82	87	85
22	E2Q96	74	91	66	98	89	96	89
23	E2Q97	73	92	67	94	95	97	91
24	VBLK01	90	89	67	101	96	100	90
25	VBLK70	92	112	77	125	102	112	98
26	VBLK73	82	98	69	107	88	97	89
27	VBLK76	75	91	66	105	86	89	87
28	VBLK79	82	96	67	100	85	[illegible]	[illegible]
29	VHBLK01	100	101	73	92	91	89	91
30								

		QC LIMITS
VDMC1	(VCL) = Vinyl chloride-d3	(65-131)
VDMC2	(CLA) = Chloroethane-d5	(71-131)
VDMC3	(DCE) = 1,1-Dichloroethene-d2	(55-104)
VDMC4	(BUT) = 2-Butanone-d5	(49-155)
VDMC5	(CLF) = Chloroform-d	(78-121)
VDMC6	(DCA) = 1,2-Dichloroethane-d4	(78-129)
VDMC7	(BEN) = Benzene-d6	(77-124)

Column to be used to flag recovery values
* Value outside of contract required QC limits

2B - FORM II VOA-2
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: _____ SDG No.: E2PP3

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC8 (DPA) #	VDMC9 (TOL) #	VDMC10 (TDP) #	VDMC11 (HEX) #	VDMC12 (DXE) #	VDMC13 (TCA) #	VDMC14 (DCZ) #	TOT OUT
01	E2PP3	113	104	105	108		112	116	0
02	E2PR3	110	102	102	109		116	116	0
03	E2PR4	116	101	103	109		122	121	0
04	E2PR5	119	109	106	97		117	116	0
05	E2PR6	116	104	105	104		118	112	0
06	E2PS3	96	89	82	74		91	99	0
07	E2PS4	96	90	86	73		87	97	0
08	E2PS5	96	90	87	79		94	100	0
09	E2PS5DL	96	85	87	84		95	97	0
10	E2PS6	99	89	89	81		92	94	0
11	E2PS7	96	88	83	75		97	100	0
12	E2PS8	98	90	87	77		92	99	0
13	E2PS8MS	98	91	85	73		87	97	0
14	E2PS8MSD	99	87	89	87		97	96	0
15	E2PS9	95	88	85	77		91	95	0
16	E2Q13	94	88	88	88		98	101	0
17	E2Q14	96	87	86	80		90	98	0
18	E2Q66	101	88	91	95		107	106	0
19	E2Q66DL	97	88	85	87		88	93	1
20	E2Q95	94	87	87	84		98	100	0
21	E2Q95DL	93	85	87	85		94	91	0
22	E2Q96	96	87	85	82		103	101	0
23	E2Q97	99	86	88	87		102	98	0
24	VBLK01	90	89	83	95		88	95	0
25	VBLK70	105	98	102	112		112	111	0
26	VBLK73	96	88	90	92		94	100	0
27	VBLK76	93	86	87	89		92	98	0
28	VBLK79	87	83	84	96		88	92	0
29	VHBLK01	92	90	80	79		86	90	0
30									

	QC LIMITS
VDMC8 (DPA) = 1,2-Dichloropropane-d6	(79-124)
VDMC9 (TOL) = Toluene-d8	(77-121)
VDMC10 (TDP) = trans-1,3-Dichloropropene-d4	(73-121)
VDMC11 (HEX) = 2-Hexanone-d5	(28-135)
VDMC12 (DXE) = 1,4-Dioxane-d8	(50-150)
VDMC13 (TCA) = 1,1,2,2-Tetrachloroethane-d2	(73-125)
VDMC14 (DCZ) = 1,2-Dichlorobenzene-d4	(80-131)

Column to be used to flag recovery values
* Values outside of contract required QC limits
Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

3A - FORM III VOA-1
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: _____ SDG No.: E2PP3

Matrix Spike - EPA Sample No.: E2PS8 Level: (TRACE or LOW) TRACE

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS %REC #	QC LIMITS REC.
1,1-Dichloroethene	5.0	0.0	6.0	121	61-145
Benzene	5.0	0.0	6.1	122	76-127
Trichloroethene	5.0	0.0	5.6	112	71-120
Toluene	5.0	0.0	5.8	117	76-125
Chlorobenzene	5.0	0.0	5.7	114	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %REC #	%RPD #	QC LIMITS	
					RPD	REC.
1,1-Dichloroethene	5.0	6.0	121	0	0-14	61-145
Benzene	5.0	5.8	116	5	0-11	76-127
Trichloroethene	5.0	5.3	105	7	0-14	71-120
Toluene	5.0	5.7	114	3	0-13	76-125
Chlorobenzene	5.0	5.6	111	3	0-13	75-130

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: _____

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
VBLK70

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: _____ SDG No.: E2PP3

Lab File ID: C3697.D Lab Sample ID: 8040048-BLK1

Instrument ID: C-5973

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 04/19/2008

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 1450

GC Column: DB-624 ID: 0.20 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E2PP3	0008921-01	C3710.D	2044
02	E2PR3	0008921-02	C3711.D	2111
03	E2PR4	0008921-03	C3712.D	2139
04	E2PR5	0008921-04	C3713.D	2206
05	E2PR6	0008921-05	C3714.D	2233
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COMMENTS: _____

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
VBLK73

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: SDG No.: E2PP3

Lab File ID: C3740.D Lab Sample ID: 8040054-BLK1

Instrument ID: C-5973

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 04/20/2008

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 1508

GC Column: DB-624 ID: 0.20 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E2PS4	0008921-07	C3742.D	1604
02	E2PS8	0008921-11	C3743.D	1631
03	E2PS8MS	8040054-MS1	C3744.D	1658
04	E2PS8MSD	8040054-MSD1	C3745.D	1726
05	E2PS9	0008921-12	C3746.D	1754
06	E2Q13	0008921-13	C3747.D	1821
07	E2Q14	0008921-14	C3748.D	1849
08	E2PS5DL	0008921-08RE1	C3749.D	1916
09	E2PS5	0008921-08	C3750.D	1943
10	E2PS6	0008921-09	C3752.D	2038
11	E2PS7	0008921-10	C3753.D	2105
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COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
VBLK76

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: _____ SDG No.: E2PP3

Lab File ID: C3780.D Lab Sample ID: 8040062-BLK1

Instrument ID: C-5973

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 04/21/2008

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 1713

GC Column: DB-624 ID: 0.20 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E2Q95	0008950-01	C3788.D	2105
02	E2Q96	0008950-02	C3790.D	2201
03	E2Q97	0008950-03	C3792.D	2257
04	E2Q66	0008950-04	C3793.D	2324
05	E2PS3	0008921-06	C3795.D	0020
06				
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COMMENTS: _____

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
VBLK79

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: SDG No.: E2PP3

Lab File ID: C3807.D Lab Sample ID: 8040070-BLK1

Instrument ID: C-5973

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 04/23/2008

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 0951

GC Column: DB-624 ID: 0.20 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E2Q95DL	0008950-01RE1	C3813.D	1232
02	E2Q66DL	0008950-04RE1	C3814.D	1258
03				
04				
05				
06				
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COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
VBLK01

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: SDG No.: E2PP3

Lab File ID: C3981.D Lab Sample ID: 8050021-BLK1

Instrument ID: C-5973

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 05/06/2008

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 2212

GC Column: DB-624 ID: 0.20 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VHBLK01	0008921-15	C3982.D	2241
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COMMENTS:

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref _____ SDG No.: E2PP3

GC Column: DB-624 ID: 0.20 (mm) Init. Calib. Date(s): 04/16/2008 04/16/2008

EPA Sample No.(VSTD#####): VSTD00560 Date Analyzed: 04/16/2008

Lab File ID (Standard): C3563.D Time Analyzed: 1013

Instrument ID: C-5973 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	46378		10.44		61276		6.40		19528		13.26	
	UPPER LIMIT	92756		10.94		122552		6.90		39056		13.76	
	LOWER LIMIT	23189		9.94		30638		5.90		9764		12.76	
	EPA SAMPLE NO.												
01	VSTD02060	45165		10.44		58776		6.40		21825		13.26	
02	VSTD01060	47379		10.44		62102		6.40		21442		13.26	
03	VSTD00160	45191		10.44		59464		6.40		17020		13.26	
04	VSTD0.560	38595		10.44		49690		6.41		14449		13.26	
05	VSTD00561	39534		10.44		49422		6.41		18275		13.26	
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IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref _____ SDG No.: E2PP3

GC Column: DB-624 ID: 0.20 (mm) Init. Calib. Date(s): 04/16/2008 04/16/2008

EPA Sample No.(VSTD#####): VSTD00570 Date Analyzed: 04/19/2008

Lab File ID (Standard): C3696.D Time Analyzed: 1423

Instrument ID: C-5973 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	37893		10.44		48529		6.40		17105		13.26	
	UPPER LIMIT	75786		10.94		97058		6.90		34210		13.76	
	LOWER LIMIT	18947		9.94		24265		5.90		8553		12.76	
	EPA SAMPLE NO.												
01	VBLK70	37019		10.43		45890		6.41		13584		13.26	
02	E2PP3	35696		10.44		45234		6.41		13627		13.26	
03	E2PR3	35342		10.44		44086		6.41		13690		13.26	
04	E2PR4	34524		10.44		43474		6.41		12503		13.26	
05	E2PR5	31264		10.44		40711		6.41		11338		13.26	
06	E2PR6	33511		10.44		42369		6.41		12447		13.26	
07	VSTD00571	29645		10.44		41358		6.40		12234		13.26	
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IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref _____ SDG No.: E2PP3

GC Column: DB-624 ID: 0.20 (mm) Init. Calib. Date(s): 04/16/2008 04/16/2008

EPA Sample No.(VSTD#####): VSTD00573 Date Analyzed: 04/20/2008

Lab File ID (Standard): C3739.D Time Analyzed: 1441

Instrument ID: C-5973 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	35587		10.43		47709		6.40		15566		13.26	
	UPPER LIMIT	71174		10.93		95418		6.90		31132		13.76	
	LOWER LIMIT	17794		9.93		23855		5.90		7783		12.76	
	EPA SAMPLE NO.												
01	VBLK73	38445		10.43		50035		6.40		12856		13.26	
02	E2PS4	36010		10.44		48068		6.40		12194		13.26	
03	E2PS8	36125		10.44		48265		6.41		12273		13.26	
04	E2PS8MS	35260		10.44		48401		6.41		12408		13.26	
05	E2PS8MSD	38457		10.43		50193		6.41		14024		13.26	
06	E2PS9	35396		10.44		46891		6.41		12814		13.26	
07	E2Q13	38712		10.43		49626		6.40		13905		13.26	
08	E2Q14	35765		10.44		46069		6.41		12656		13.26	
09	E2PS5DL	38384		10.44		49643		6.40		13448		13.26	
10	E2PS5	35587		10.44		47787		6.41		12449		13.26	
11	E2PS6	34738		10.44		45534		6.40		12378		13.26	
12	E2PS7	35189		10.43		46725		6.40		12188		13.26	
13	VSTD00574	36145		10.44		48698		6.40		15160		13.26	
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IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref _____ SDG No.: E2PP3

GC Column: DB-624 ID: 0.20 (mm) Init. Calib. Date(s): 04/16/2008 04/16/2008

EPA Sample No.(VSTD#####): VSTD00576 Date Analyzed: 04/21/2008

Lab File ID (Standard): C3779.D Time Analyzed: 1645

Instrument ID: C-5973 Heated Purge: (Y/N) N

	IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD		37215		10.44		49875		6.40		15884		13.26	
	UPPER LIMIT		74430		10.94		99750		6.90		31768		13.76	
	LOWER LIMIT		18608		9.94		24938		5.90		7942		12.76	
	EPA SAMPLE NO.													
01	VBLK76		37912		10.44		50127		6.41		12993		13.26	
02	E2Q95		36910		10.44		51638		6.41		14227		13.26	
03	E2Q96		34573		10.44		44886		6.41		12444		13.26	
04	E2Q97		33707		10.44		45143		6.40		11948		13.26	
05	E2Q66		33897		10.44		46250		6.40		12415		13.26	
06	E2PS3		35085		10.44		47449		6.41		11123		13.26	
07	VSTD00577		33069		10.44		46371		6.40		12622		13.26	
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IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref _____ SDG No.: E2PP3

GC Column: DB-624 ID: 0.20 (mm) Init. Calib. Date(s): 04/16/2008 04/16/2008

EPA Sample No.(VSTD#####): VSTD00579 Date Analyzed: 04/23/2008

Lab File ID (Standard): C3806.D Time Analyzed: 0924

Instrument ID: C-5973 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	42218		10.43		56677		6.41		18402		13.26	
	UPPER LIMIT	84436		10.93		113354		6.91		36804		13.76	
	LOWER LIMIT	21109		9.93		28339		5.91		9201		12.76	
	EPA SAMPLE NO.												
01	VBLK79	41174		10.44		51930		6.40		14052		13.26	
02	E2Q95DL	37447		10.43		49689		6.41		13690		13.26	
03	E2Q66DL	37617		10.43		49959		6.41		12536		13.26	
04	VSTD00580	38865		10.43		51006		6.40		17025		13.26	
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IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref _____ SDG No.: E2PP3

GC Column: DB-624 ID: 0.20 (mm) Init. Calib. Date(s): 04/27/2008 04/27/2008

EPA Sample No.(VSTD#####): VSTD00586 Date Analyzed: 04/27/2008

Lab File ID (Standard): C3882.D Time Analyzed: 1815

Instrument ID: C-5973 Heated Purge: (Y/N) N

	IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD		142601		10.44		188001		6.40		62057		13.26	
	UPPER LIMIT		285202		10.94		376002		6.90		124114		13.76	
	LOWER LIMIT		71301		9.94		94001		5.90		31029		12.76	
	EPA SAMPLE NO.													
01	VSTD02086		158434		10.43		209933		6.40		71111		13.26	
02	VSTD01086		157973		10.43		206992		6.40		74595		13.26	
03	VSTD0.586		161710		10.43		207277		6.41		60775		13.26	
04	VSTD00186		156475		10.44		200691		6.40		61715		13.26	
05	VSTD00587		130195		10.43		169793		6.40		56037		13.26	
06														
07														
08														
09														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														

IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref _____ SDG No.: E2PP3

GC Column: DB-624 ID: 0.20 (mm) Init. Calib. Date(s): 04/27/2008 04/27/2008

EPA Sample No.(VSTD#####): VSTD00501 Date Analyzed: 05/06/2008

Lab File ID (Standard): C3980.D Time Analyzed: 2144

Instrument ID: C-5973 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	118180		10.43		151065		6.40		50588		13.26	
	UPPER LIMIT	236360		10.93		302130		6.90		101176		13.76	
	LOWER LIMIT	59090		9.93		75533		5.90		25294		12.76	
	EPA SAMPLE NO.												
01	VBLK01	119771		10.44		151552		6.40		41499		13.26	
02	VHBLK01	105632		10.43		137722		6.40		39156		13.26	
03	VSTD00502	112233		10.43		142911		6.40		44032		13.26	
04													
05													
06													
07													
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V
ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Sample Delivery Group: E2PP3 CERCLIS No: IND005102239

Case No: 37367 Site Name/Location: LANE Street GW Contamination (FN)

Contractor or EPA Lab: AH Scientific Data User: IDEM

No. of Samples: 18 Date Sampled or Date Received: 8 May 08

Have Chain-of-Custody records been received? Yes ✓ No ____
Have traffic reports or packing lists been received? Yes ✓ No ____
If no, are traffic report or packing list numbers written on the Chain-of-Custody Record?
Yes ____ No ____
If no, which traffic report or packing list numbers are missing?

____ ____ ____ ____
____ ____ ____ ____

Are basic data forms in? Yes ✓ No ____
No of samples claimed: 18 No. of samples received: ____

Received by: cpdavis Date: 8 May 08

Received by LSSS: cpdavis Date: 12 May 08

Review started: 5-20-08 Reviewer Signature: Stefanie Tobin

Total time spent on review: 11hrs Date review completed: 5-28-08

Copied by: A. C. Harvey Date: May 30, 2008

Mailed to user by: cpdavis Date: 30 May 08

DATA USER:
Please fill in the blanks below and return this form to:
Sylvia Griffin, Data Mgmt. Coordinator, Region V, ML-10C

Data received by: ____ Date: ____

Data review received by: ____ Date: ____

Inorganic Data Complete	[ ] Suitable for Intended Purpose [ ] ✓ if OK
Organic Data Complete	[ ] Suitable for Intended Purpose [ ] ✓ if OK
Dioxin data Complete	[ ] Suitable for Intended Purpose [ ] ✓ if OK
SAS Data Complete	[ ] Suitable for Intended Purpose [ ] ✓ if OK

PROBLEMS: Please indicate reasons why data are not suitable for your uses.

____

____

Received by Data Mgmt. Coordinator for Files. Date: ____

ESAT Controlled Number: ESAT5.17.00018-Pd 5/23/08

DATE: May 23, 2008

Indiana Dept of Environmental Management
ATTN: Mark Jaworski
100 N. Senate Avenue – Room N1255
Indianapolis, IN 46804-2222

SITE NAME: Lane Street Groundwater Contamination (IN)

CASE #	LAB	SAMPLES	SDG	MATRIX
37367	A4 Scientific	20	E2PP4	water

Upon receipt of data, please check each package for completeness and note any missing deliverables below.

Send this form back to Sylvia Griffin, Data Management Coordinator after filling in the blanks below.

Data Received by:_____ Date:_____

PROBLEMS:

Please indicate if data is complete, and note if there are any deliverables missing from the cases noted above.

_____

_____

Received by Data Management Coordinator, CRL for file.

Signature:_____ Date:_____

FROM: **U.S. EPA - Region 5**
Sylvia Griffin
Central Regional Laboratory
536 S. Clark, 10th Floor
Chicago, IL 60605

Sent By: Pat Davis
Data Coordinator
ESAT Region 5 **TechLaw**

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V
SUPERFUND DIVISION **Controlled Document**

DATE: # ESAT5.16.00007
ack 5-22-08

SUBJECT: Review of Data
Received for Review on: May 06, 2008

FROM: Stephen L. Ostrodka, Chief (SRT-4J)
Superfund Field Services Section
for Steve Ostrodka
Richard L Bynum
5/21/08

TO: Data User: IDEM.

We have reviewed the data for the following case:

Site Name: Lane Street Groundwater Contamination (IN)

Case Number: 37367 SDG Number: E2PP4

Number and Type of Samples: 20 water samples (trace VOA)

Sample Numbers: E2PP4 - E2PP7, E2PQ0, E2PR7 - E2PR9, E2PS0 - E2PS2, E2PT0 - E2PT2, E2PX3 - E2PX5, E2Q04 - E2Q06

Laboratory: A4 Scientific, Inc Hrs for Review:

Following are our findings:
the data are useable and acceptable with the qualifications described in the attached narrative.
Richard L Bynum

RECEIVED
MAY 30 2008
DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY

CC: Howard Pham
Region 5 TPO
Mail Code: SRT-4J

Case Number: 37367 SDG Number: E2PP4
Site Name: Lane Street Groundwater Contamination (IN) Laboratory: A4 Scientific, Inc.

Below is a summary of the out-of-control audits and the possible effects on the data for this case:

Twenty (20) water samples labeled E2PP4 - E2PP7, E2PQ0, E2PR7 - E2PR9, E2PS0 - E2PS2, E2PT0 - E2PT2, E2PX3 - E2PX5 and E2Q04 - E2Q06, were shipped to A4 Scientific, Inc located in The Woodlands, TX. Twenty (20) water samples; E2PP4 - E2PP7, E2PQ0, E2PR7 - E2PR9, E2PS0 - E2PS2, E2PT0 - E2PT2, E2PX3 - E2PX5 and E2Q04 - E2Q06, were collected 04-14-2008 and received on 04-15-2008 intact and properly cooled.

All samples were analyzed according to CLP SOW SOM01.2 and reviewed according to the NFG for SOM01.1 and the SOP for ESAT 5/TechLaw Validation of Contract Laboratory Program Organic Data (Version 2.1).

Sample E2PP7 was designated by the samplers to be used for laboratory matrix spike / matrix spike duplicate analyses.

No samples were identified as field blanks or field duplicates.

Case Number: 37367 SDG Number: E2PP4
Site Name: Lane Street Groundwater Contamination (IN) Laboratory: A4 Scientific, Inc.

1. HOLDING TIME

No Problems were found.

2. GC/MS TUNING AND GC INSTRUMENT PERFORMANCE

The following trace VOA samples are associated with no preceding valid instrument performance check (IPC). However, the CCV preceding the samples met the opening CCV and closing CCV criteria. Detected and non-detected compounds are not qualified for this criterion.

E2PS2, E2PT0, E2PT1, E2PT2, E2Q05, E2PS0, VBLK76

3. CALIBRATION

The following trace VOA samples are associated with an initial calibration with a percent relative standard deviation (%RSD) that exceeded the criteria of 30%. A detect in sample E2PP4 is qualified "J". The non-detects are qualified "UJ".

Chloroform
E2PP4, E2PP5, E2PP6, E2PP6DL, E2PP7, E2PP7MS, E2PP7MSD, E2PQ0, E2PR7, E2PR8, E2PR8DL, E2PR9, E2PS0, E2PS1, E2PS2, E2PT0, E2PT1, E2PT1DL, E2PT2, E2PX3, E2PX4, E2PX5, E2Q04, E2Q05, E2Q06, VBLK74, VBLK76, VBLK79, VBLK84, VHBLK01

The following trace VOA samples are associated with an opening CCV percent difference (%D) greater than 30%. The compounds were not detected in any of the samples. The non-detected compounds are qualified "UJ".

1,2,4-Trichlorobenzene, 1,2,3-Trichlorobenzene
E2PP4, E2PP5, E2PP6, E2PP6DL, E2PP7, E2PP7MS, E2PP7MSD, E2PQ0, E2PR7, E2PR8, E2PR8DL, E2PR9, E2PS1, E2PT1DL, E2PX3, E2PX4, E2PX5, E2Q04, E2Q06, VBLK74, VBLK79, VBLK84, VHBLK01

4. BLANKS

The following trace volatiles samples have common contaminant analyte concentrations reported less than the CRQL. The associated method blank concentration has common contaminant analyte concentration less than 2X the CRQL. Detected compounds are qualified "U". Non-detected compounds are not qualified. Reported sample concentrations have been elevated to the CRQL.

Methylene chloride
E2PP6DL, E2PR8DL, E2PS2, VHBLK01

Case Number: 37367 SDG Number: E2PP4
Site Name: Lane Street Groundwater Contamination (IN) Laboratory: A4 Scientific, Inc.

The following trace volatile sample has common contaminant analyte concentrations reported less than the 4X the CRQL. The associated method blank concentration has common contaminant analyte concentration less than 2X the CRQL. Detected compounds are qualified "U". Non-detected compounds are not qualified. Sample concentrations have been reported as the adjusted CRQL.

Methylene chloride
E2PP7MSD

5. DEUTERATED MONITORING COMPOUND AND SURROGATE RECOVERY

The following trace VOA samples have one or more DMC/SMC recovery values less than the primary lower limit but greater than or equal to 20%. The compounds were not detected in any of the samples. The non-detected compounds are qualified "UJ".

E2PP7MS
Dichlorodifluoromethane, Chloromethane, Bromomethane, Chloroethane, Carbon Disulfide

E2PP4
1,1,2,2-Tetrachloroethane, 1,2-Dibromo-3-chloropropane

6A. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample E2PP7 was designated by the samplers to be used for laboratory matrix spike / matrix spike duplicate analyses.

The relative percent difference (RPD) between the following trace VOA matrix spike and matrix spike duplicate recoveries is outside criteria. This compound was not detected in the unspiked sample E2PP7. Non-detected compound in the unspiked sample, E2PP7, is qualified below.

E2PP7MS, E2PP7MSD
Trichloroethene

The following trace VOA matrix spike/matrix spike duplicate samples have percent recovery greater than the upper acceptance criteria. This compound was not detected in the unspiked sample E2PP7. Non-detected compound in the unspiked sample, E2PP7, is qualified below.

E2PP7MS
Trichloroethene

The following trace VOA matrix spike/matrix spike duplicate samples have percent recovery greater than the upper acceptance criteria. This compound was not detected in the unspiked sample E2PP7. Non-detected compound in the unspiked sample, E2PP7, is not qualified for this criterion.

E2PP7MS, E2PP7MSD
Benzene

The following trace VOA matrix spike/matrix spike duplicate samples have percent recovery less than 20%. This compound was not detected in the unspiked sample E2PP7. Non-detected compound in the unspiked sample, E2PP7, is qualified "R".

E2PP7MSD
Trichloroethene

6B. LABORATORY CONTROL SAMPLE

Not applicable to this analysis.

7. FIELD BLANK AND FIELD DUPLICATE

No samples were identified as field blanks or field duplicates.

8. INTERNAL STANDARDS

No Problems were found.

9. COMPOUND IDENTIFICATION

After reviewing the mass spectra and chromatograms it does not appear that all VOA compounds were properly identified.

It appears that Trichloroethene was not identified by the instrument in sample E2PP7MSD. A comparison of the chromatograms for samples E2PP7, E2PP7MS and E2PP7MSD demonstrate that while no compound at the expected retention time was present in the field sample E2PP7, peaks of similar height/width at the appropriate retention time is present in both QC samples E2PP7MS and E2PP7MSD. The peak was identified as Trichloroethene in only sample E2PP7MS. This suggests that the analyte is present in E2PP7MSD, however additional information is required for an absolute identification. Copies of the chromatograms for the three samples is included with the hardcopy validation package.

10. COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

The following volatile samples have analyte concentrations below the quantitation limit (CRQL). Detected compounds are qualified "J".

E2PP6DL
trans-1,2-Dichloroethene, 1,1-Dichloroethane

E2PQ0, VBLK76, VBLK79
Methylene chloride

E2PR7, E2PR8
1,1-Dichloroethane

E2PR8DL
trans-1,2-Dichloroethene

E2PT1
cis-1,2-Dichloroethene

E2PX3
Toluene

E2PX4
Methylene chloride, Trichloroethene

E2Q04
Cyclohexane, Methylcyclohexane, Toluene, Ethylbenzene, m,p-Xylene

E2Q06
Methylene chloride, cis-1,3-Dichloropropene, Toluene

11. SYSTEM PERFORMANCE

GC/MS baseline indicated acceptable performance.

12. *ADDITIONAL INFORMATION*

The following trace VOA samples have analyte concentrations which exceed the instruments calibration range. The detected results are qualified "J". The results from the diluted analyses should be considered the final concentrations for the affected analytes.

E2PP6, E2PR8
cis-1,2-Dichloroethene

E2PT1
Trichloroethene

Case Number: 37367 SDG Number: E2PP4
Site Name: Lane Street Groundwater Contamination (IN) Laboratory: A4 Scientific, Inc.

The following trace VOA sample has analyte concentrations which exceed the instruments calibration range. The sample was not re-analyzed at dilution. The detected result is qualified "J".

E2PR7
cis-1,2-Dichloroethene

Reviewed by: Steffanie Tobin/Techlaw-ESAT
Date: May 21, 2008

Case Number: 37367 SDG Number: E2PP4
Site Name: Lane Street Groundwater Contamination (IN) Laboratory: A4 Scientific, Inc.

CADRE Data Qualifier Sheet

Qualifiers	Data Qualifier Definitions
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the action limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
NJ	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification and the associated numerical value represents its approximate concentration.
R	The data are unusable. (The compound may or may not be present.)

Reviewed by: Steffanie Tobin/Techlaw-ESAT
Date: May 21, 2008

Case #: 37367
SDG : E2PP4
Site : LANE STREET GROUND WATER CONTAMINATION
Lab. : A4
Reviewer :
Date :

Number of Soil Samples : 0
Number of Water Samples : 20
Number of Sediment Samples : 0

Sample Number :	E2PP4		E2PP5		E2PP6		E2PP6DL		E2PP7	
Sampling Location :	GW13		GW24		GW25		GW25		GW33	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	4/14/2008		4/14/2008		4/14/2008				4/14/2008	
Time Sampled :										
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :	2.0		2.0		2.0		2.0		2.0	
Dilution Factor :	1.0		1.0		1.0		2.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
Chloromethane	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
Vinyl chloride	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
Bromomethane	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
Chloroethane	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
Trichlorofluoromethane	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
1,1-Dichloroethene	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
Acetone	5.0	U	5.0	U	5.0	U	10	U	5.0	U
Carbon Disulfide	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
Methyl acetate	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
Methylene chloride	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
trans-1,2-Dichloroethene	0.50	U	0.50	U	0.53		0.43	J	0.50	U
Methyl tert-butyl ether	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
1,1-Dichloroethane	0.50	U	0.50	U	0.66		0.64	J	0.50	U
cis-1,2-Dichloroethene	0.50	U	0.50	U	23	J	21		0.50	U
2-Butanone	5.0	U	5.0	U	5.0	U	10	U	5.0	U
Bromochloromethane	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
Chloroform	5.9	J	0.50	UJ	0.50	UJ	1.0	UJ	0.50	UJ
1,1,1-Trichloroethane	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
Cyclohexane	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
Carbon tetrachloride	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
Benzene	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
1,2-Dichloroethane	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
Trichloroethene	0.50	U	0.50	U	0.50	U	1.0	U	0.50	R
Methylcyclohexane	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
1,2-Dichloropropane	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
Bromodichloromethane	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
cis-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
4-Methyl-2-pentanone	5.0	U	5.0	U	5.0	U	10	U	5.0	U
Toluene	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
trans-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
1,1,2-Trichloroethane	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U

Case #: 37367
Site :
No. :
Reviewer :
Date :

SDG : E2PP4
LANE STREET GROUND WATER CONTAMINATION
A4

Sample Number :	E2PP4		E2PP5		E2PP6		E2PP6DL		E2PP7	
Sampling Location :	GW13		GW24		GW25		GW25		GW33	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	4/14/2008		4/14/2008		4/14/2008				4/14/2008	
Time Sampled :										
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :	2.0		2.0		2.0		2.0		2.0	
Dilution Factor :	1.0		1.0		1.0		2.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
2-Hexanone	5.0	U	5.0	U	5.0	U	10	U	5.0	U
Dibromochloromethane	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
1,2-Dibromoethane	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
Chlorobenzene	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
Ethylbenzene	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
o-Xylene	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
m,p-Xylene	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
Styrene	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
Bromoform	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
Isopropylbenzene	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
1,1,2,2-Tetrachloroethane	0.50	UJ	0.50	U	0.50	U	1.0	U	0.50	U
1,3-Dichlorobenzene	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
1,4-Dichlorobenzene	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
1,2-Dichlorobenzene	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
1,2-Dibromo-3-chloropropane	0.50	UJ	0.50	U	0.50	U	1.0	U	0.50	U
1,2,4-Trichlorobenzene	0.50	UJ	0.50	UJ	0.50	UJ	1.0	UJ	0.50	UJ
1,2,3-Trichlorobenzene	0.50	UJ	0.50	UJ	0.50	UJ	1.0	UJ	0.50	UJ

Case #: 37367
SDG : E2PP4
Site : LANE STREET GROUND WATER CONTAMINATION
Lab. : A4
Reviewer :
Date :

Sample Number :	E2PP7MS		E2PP7MSD		E2PQ0		E2PR7		E2PR8	
Sampling Location :	GW33		GW33		GW34		GW18		GW19	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :					4/14/2008		4/14/2008		4/14/2008	
Time Sampled :										
%Moisture :	0		0		N/A		N/A		N/A	
pH :	2.0		2.0		2.0		2.0		2.0	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U
Chloromethane	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U
Vinyl chloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromomethane	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U
Chloroethane	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U
Trichlorofluoromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethene	6.2		6.6		0.50	U	0.50	U	0.50	U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Acetone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Carbon Disulfide	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U
Methyl acetate	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methylene chloride	2.1		0.73	U	0.18	J	2.9		0.50	U
trans-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	0.58		0.75	
ethyl tert-butyl ether	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethane	0.50	U	0.50	U	0.50	U	0.42	J	0.44	J
cis-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	32	J	31	J
2-Butanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Bromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroform	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ
1,1,1-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Cyclohexane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Carbon tetrachloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Benzene	6.5		6.5		0.50	U	0.50	U	0.50	U
1,2-Dichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Trichloroethene	6.1		0.50	U	0.50	U	0.50	U	0.50	U
Methylcyclohexane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichloropropane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromodichloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
cis-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
4-Methyl-2-pentanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Toluene	6.2		6.2		0.50	U	0.50	U	0.50	U
trans-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U

Case #: 37367
Site :
Lab. :
Reviewer :
Date :

SDG : E2PP4
LANE STREET GROUND WATER CONTAMINATION
A4

Sample Number :	E2PP7MS		E2PP7MSD		E2PQ0		E2PR7		E2PR8	
Sampling Location :	GW33		GW33		GW34		GW18		GW19	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :					4/14/2008		4/14/2008		4/14/2008	
Time Sampled :										
%Moisture :	0		0		N/A		N/A		N/A	
pH :	2.0		2.0		2.0		2.0		2.0	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
2-Hexanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Dibromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromoethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chlorobenzene	5.7		6.1		0.50	U	0.50	U	0.50	U
Ethylbenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
o-Xylene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
m,p-Xylene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Styrene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromoform	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Isopropylbenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2,2-Tetrachloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,3-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,4-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromo-3-chloropropane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2,4-Trichlorobenzene	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ
1,2,3-Trichlorobenzene	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ

Case #: 37367
Site :
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Reviewer :
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SDG : E2PP4
LANE STREET GROUND WATER CONTAMINATION
A4

Sample Number :	E2PR8DL		E2PR9		E2PS0		E2PS1		E2PS2	
Sampling Location :	GW19		GW21		GW20		GW23		GW22	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :			4/14/2008		4/14/2008		4/14/2008		4/14/2008	
Time Sampled :										
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :	2.0		2.0		2.0		2.0		2.0	
Dilution Factor :	2.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloromethane	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Vinyl chloride	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromomethane	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroethane	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Trichlorofluoromethane	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethene	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Acetone	10	U	5.0	U	5.0	U	5.0	U	5.0	U
Carbon Disulfide	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Methyl acetate	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Methylene chloride	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
trans-1,2-Dichloroethene	0.46	J	0.50	U	0.50	U	0.50	U	0.50	U
Methyl tert-butyl ether	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethane	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
cis-1,2-Dichloroethene	21		0.50	U	0.50	U	0.50	U	0.50	U
2-Butanone	10	U	5.0	U	5.0	U	5.0	U	5.0	U
Bromochloromethane	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroform	1.0	UJ	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ
1,1,1-Trichloroethane	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Cyclohexane	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Carbon tetrachloride	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Benzene	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichloroethane	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Trichloroethene	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Methylcyclohexane	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichloropropane	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromodichloromethane	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
cis-1,3-Dichloropropene	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
4-Methyl-2-pentanone	10	U	5.0	U	5.0	U	5.0	U	5.0	U
Toluene	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
trans-1,3-Dichloropropene	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloroethane	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U

Case #: 37367
SDG : E2PP4
Site :
LANE STREET GROUND WATER CONTAMINATION
Lab. :
A4
Reviewer :
Date :

Sample Number :	E2PR8DL		E2PR9		E2PS0		E2PS1		E2PS2	
Sampling Location :	GW19		GW21		GW20		GW23		GW22	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :			4/14/2008		4/14/2008		4/14/2008		4/14/2008	
Time Sampled :										
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :	2.0		2.0		2.0		2.0		2.0	
Dilution Factor :	2.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
2-Hexanone	10	U	5.0	U	5.0	U	5.0	U	5.0	U
Dibromochloromethane	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromoethane	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Chlorobenzene	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Ethylbenzene	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
o-Xylene	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
m,p-Xylene	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Styrene	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromoform	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
Isopropylbenzene	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2,2-Tetrachloroethane	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
1,3-Dichlorobenzene	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
1,4-Dichlorobenzene	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichlorobenzene	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromo-3-chloropropane	1.0	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2,4-Trichlorobenzene	1.0	UJ	0.50	UJ	0.50	U	0.50	UJ	0.50	U
1,2,3-Trichlorobenzene	1.0	UJ	0.50	UJ	0.50	U	0.50	UJ	0.50	U

Case #: 37367
Site :
Lab. :
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Date :

SDG : E2PP4
LANE STREET GROUND WATER CONTAMINATION
A4

Sample Number :	E2PT0		E2PT1		E2PT1DL		E2PT2		E2PX3	
Sampling Location :	GW16		GW15		GW15		GW14		GW17	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	4/14/2008		4/14/2008				4/14/2008		4/14/2008	
Time Sampled :										
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :	2.0		2.0		2.0		2.0		2.0	
Dilution Factor :	1.0		1.0		2.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
Chloromethane	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
Vinyl chloride	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
Bromomethane	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
Chloroethane	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
Trichlorofluoromethane	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
1,1-Dichloroethene	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
Acetone	5.0	U	5.0	U	10	U	5.0	U	5.0	U
Carbon Disulfide	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
Methyl acetate	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
Methylene chloride	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
trans-1,2-Dichloroethene	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
Methyl tert-butyl ether	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
1,1-Dichloroethane	2.0		6.5		2.9		0.50	U	3.0	
cis-1,2-Dichloroethene	0.50	U	0.38	J	1.0	U	0.50	U	0.50	U
2-Butanone	5.0	U	5.0	U	10	U	5.0	U	5.0	U
Bromochloromethane	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
Chloroform	0.50	UJ	0.50	UJ	1.0	UJ	0.50	UJ	0.50	UJ
1,1,1-Trichloroethane	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
Cyclohexane	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
Carbon tetrachloride	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
Benzene	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
1,2-Dichloroethane	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
Trichloroethene	2.5		24	J	9.9		0.50	U	2.7	
Methylcyclohexane	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
1,2-Dichloropropane	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
Bromodichloromethane	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
cis-1,3-Dichloropropene	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
4-Methyl-2-pentanone	5.0	U	5.0	U	10	U	5.0	U	5.0	U
Toluene	0.50	U	0.50	U	1.0	U	0.50	U	0.19	J
trans-1,3-Dichloropropene	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
1,1,2-Trichloroethane	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U

Case #: 37367
Site :
Lab. :
Reviewer :
Date :

SDG : E2PP4
LANE STREET GROUND WATER CONTAMINATION
A4

Sample Number :	E2PT0		E2PT1		E2PT1DL		E2PT2		E2PX3	
Sampling Location :	GW16		GW15		GW15		GW14		GW17	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	4/14/2008		4/14/2008				4/14/2008		4/14/2008	
Time Sampled :										
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :	2.0		2.0		2.0		2.0		2.0	
Dilution Factor :	1.0		1.0		2.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
2-Hexanone	5.0	U	5.0	U	10	U	5.0	U	5.0	U
Dibromochloromethane	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
1,2-Dibromoethane	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
Chlorobenzene	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
Ethylbenzene	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
o-Xylene	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
m,p-Xylene	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
Styrene	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
Bromoform	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
Isopropylbenzene	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
1,1,2,2-Tetrachloroethane	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
1,3-Dichlorobenzene	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
1,4-Dichlorobenzene	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
1,2-Dichlorobenzene	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
1,2-Dibromo-3-chloropropane	0.50	U	0.50	U	1.0	U	0.50	U	0.50	U
1,2,4-Trichlorobenzene	0.50	U	0.50	U	1.0	UJ	0.50	U	0.50	UJ
1,2,3-Trichlorobenzene	0.50	U	0.50	U	1.0	UJ	0.50	U	0.50	UJ

Case #: 37367 SDG : E2PP4
Site : LANE STREET GROUND WATER CONTAMINATION
Lab. : A4
Reviewer :
Date :

Sample Number :	E2PX4		E2PX5		E2Q04		E2Q05		E2Q06	
Sampling Location :	GW28		GW27		GW26		GW29		GW30	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	4/14/2008		4/14/2008		4/14/2008		4/14/2008		4/14/2008	
Time Sampled :										
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :	2.0		2.0		2.0		2.0		2.0	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Vinyl chloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromomethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Trichlorofluoromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Acetone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Carbon Disulfide	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methyl acetate	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methylene chloride	0.22	J	0.50	U	0.50	U	0.50	U	0.18	J
trans-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methyl tert-butyl ether	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
cis-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
2-Butanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Bromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroform	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ
1,1,1-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Cyclohexane	0.50	U	0.50	U	0.23	J	0.50	U	0.50	U
Carbon tetrachloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Benzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Trichloroethene	0.41	J	0.50	U	0.50	U	0.50	U	0.50	U
Methylcyclohexane	0.50	U	0.50	U	0.35	J	0.50	U	0.50	U
1,2-Dichloropropane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromodichloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
cis-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U	0.21	J
4-Methyl-2-pentanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Toluene	0.50	U	0.50	U	0.46	J	0.50	U	0.16	J
trans-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U

Case #: 37367
SDG : E2PP4
Site :
LANE STREET GROUND WATER CONTAMINATION
Lab. :
A4
Reviewer :
Date :

Sample Number :	E2PX4		E2PX5		E2Q04		E2Q05		E2Q06	
Sampling Location :	GW28		GW27		GW26		GW29		GW30	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	4/14/2008		4/14/2008		4/14/2008		4/14/2008		4/14/2008	
Time Sampled :										
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :	2.0		2.0		2.0		2.0		2.0	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
2-Hexanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Dibromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromoethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Ethylbenzene	0.50	U	0.50	U	0.14	J	0.50	U	0.50	U
o-Xylene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
m,p-Xylene	0.50	U	0.50	U	0.24	J	0.50	U	0.50	U
Styrene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromoform	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Isopropylbenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2,2-Tetrachloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,3-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,4-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromo-3-chloropropane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2,4-Trichlorobenzene	0.50	UJ	0.50	UJ	0.50	UJ	0.50	U	0.50	UJ
1,2,3-Trichlorobenzene	0.50	UJ	0.50	UJ	0.50	UJ	0.50	U	0.50	UJ

Case #: 37367
SDG : E2PP4
Site : LANE STREET GROUND WATER CONTAMINATION
Lab. : A4
Reviewer :
Date :

Sample Number :	VBLK74		VBLK76		VBLK79		VBLK84		VHBLK01	
Sampling Location :										
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :										
Time Sampled :										
%Moisture :	0		0		0		0		N/A	
pH :									2.0	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Vinyl chloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromomethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Trichlorofluoromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Acetone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Carbon Disulfide	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methyl acetate	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methylene chloride	0.50	U	0.29	J	0.43	J	0.67		0.50	U
trans-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methyl tert-butyl ether	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
cis-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
2-Butanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Bromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroform	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ
1,1,1-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Cyclohexane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Carbon tetrachloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Benzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Trichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methylcyclohexane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichloropropane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromodichloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
cis-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
4-Methyl-2-pentanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Toluene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
trans-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U

Case #: 37367
SDG : E2PP4
Site : LANE STREET GROUND WATER CONTAMINATION
[illegible] : A4
[illegible]viewer :
Date :

Sample Number :	VBLK74		VBLK76		VBLK79		VBLK84		VHBLK01	
Sampling Location :										
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :										
Time Sampled :										
%Moisture :	0		0		0		0		N/A	
pH :									2.0	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
2-Hexanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Dibromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromoethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Ethylbenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
o-Xylene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
m,p-Xylene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Styrene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromoform	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Isopropylbenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2,2-Tetrachloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
[illegible]3-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
[illegible],4-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromo-3-chloropropane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2,4-Trichlorobenzene	0.50	UJ	0.50	U	0.50	UJ	0.50	UJ	0.50	UJ
1,2,3-Trichlorobenzene	0.50	UJ	0.50	U	0.50	UJ	0.50	UJ	0.50	UJ

National Functional Guidelines Report # 9 Tue, May 6, 2008

Lab A4 (A4 Scientific) SDG E2PP4 Case 37367 Contract EPW05036 Region 5 DDTID 58614 SOW SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2PP4 Location=GW13 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
000556-67-2	Cyclotetrasiloxane, octamet..	12.31	0.62	ug/L	JN

Lab A4 (A4 Scientific) **SDG** E2PP4 **Case** 37367 **Contract** EPW05036 **Region** 5 **DDTID** 58614 **SOW** SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2PP6 Location=GW25 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
Unknown-01	Unknown-01	8.97	0.69	ug/L	J
000556-67-2	Cyclotetrasiloxane, octamet..	12.3	1.0		JN

Lab A4 (A4 Scientific) SDG E2PP4 Case 37367 Contract EPW05036 Region 5 DDTID 58614 SOW SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2PP7 Location=GW33 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
000556-67-2	Cyclotetrasiloxane, octamet..	12.3	1.0	ug/L	JN

National Functional Guidelines Report # 9 Tue, May 6, 2008

Lab A4 (A4 Scientific) SDG E2PP4 Case 37367 Contract EPW05036 Region 5 DDTID 58614 SOW SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2PR9 Location=GW21 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
000556-67-2	Cyclotetrasiloxane, octamet..	12.3	0.75	ug/L	JN

National Functional Guideline Report # 9 Tue, May 6, 2008

Lab A4 (A4 Scientific) SDG E2PP4 Case 37367 Contract EPW05036 Region 5 DDTID 58614 SOW SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2PS2 Location=GW22 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
000556-67-2	Cyclotetrasiloxane, octamet..	12.31	0.86	ug/L	JN

National Functional Guideline Report # 9

Lab A4 (A4 Scientific) SDG E2PP4 Case 37367 Contract EPW05036 Region 5 DDTID 58614 SOW SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2PT0 Location=GW16 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
E966796	Total Alkane TICs		0.81	ug/L	J
E966796	Total Alkane TICs		0.81		

National Functional Guidelines Report # 9 Tue, May 6, 2008

Lab A4 (A4 Scientific) **SDG** E2PP4 **Case** 37367 **Contract** EPW05036 **Region** 5 **DDTID** 58614 **SOW** SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2PT1 Location=GW15 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
E966796	Total Alkane TICs		0.75	ug/L	J
E966796	Total Alkane TICs		0.75		

National Functional Guideline[illegible]eport # 9 Tue, May 6, 2008

Lab A4 (A4 Scientific) SDG E2PP4 Case 37367 Contract EPW05036 Region 5 DDTID 58614 SOW SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2PT2 Location=GW14 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
E966796	Total Alkane TICs	.	0.85	ug/L	J
E966796	Total Alkane TICs	.	0.85		
000556-67-2	Cyclotetrasiloxane, octamet..	12.31	0.57		JN

Lab A4 (A4 Scientific) **SDG** E2PP4 Case 37367 **Contract** EPW05036 **Region** 5 **DDTID** 58614 **SOW** SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2PX4 Location=GW28 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
123-72-8	Butanal	4.84	0.60	ug/L	JN

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Tue, May 6, 2008

Lab A4 (A4 Scientific) SDG E2PP4 Case 37367 Contract EPW05036 Region 5 DDTID 58614 SOW SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2PX5 Location=GW27 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
E966796	Total Alkane TICs		1.6	ug/L	
E966796	Total Alkane TICs		1.6		J
Unknown-01	Unknown-01	8.96	0.59		J
000556-67-2	Cyclotetrasiloxane, octamet..	12.31	3.4		JN
Unknown-02	Unknown-02	14.05	0.70		J

Lab A4 (A4 Scientific) SDG E2PP4 Case 37367 Contract EPW05036 Region 5 DDTID 58614 SOW SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2Q04 Location=GW26 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
E966796	Total Alkane TICs		4.3	ug/L	
E966796	Total Alkane TICs		4.3		J

National Functional Guideline Report # 9 Tue, May 6, 2008

Lab A4 (A4 Scientific) SDG E2PP4 Case 37367 Contract EPW05036 Region 5 DDTID 58614 SOW SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2Q05 Location=GW29 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
E966796	Total Alkane TICs		0.99	ug/L	J
E966796	Total Alkane TICs		0.99		
Unknown-01	Unknown-01	8.96	0.78		J
000556-67-2	Cyclotetrasiloxane, octamet..	12.3	2.2		JN

National Functional Guideline Report # 9

Lab A4 (A4 Scientific) **SDG** E2PP4 **Case** 37367 **Contract** EPW05036 **Region** 5 **DDTID** 58614 **SOW** SOM01.2

Tentatively identified Compounds

VOA_Trace Sample=E2Q06 Location=GW30 Matrix=Water Level=Trace

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
E966796	Total Alkane TICs		1.1	ug/L	J
E966796	Total Alkane TICs		1.1		

Regional Transmittal Form

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE:

SUBJECT: Review of Data
Received for Review on 6 May 08

FROM: Stephen L. Ostrodka, Chief (SRT-4J)
Superfund Field Services Section

TO: Data User: IDEM

have reviewed the data for the following case:

SITE NAME: LANE STREET Groundwater Contamination (IN)

CASE NUMBER: 37367 SDG NUMBER: E2PP4

Number and Type of Samples: 20 water samples

Sample Numbers: E2PP4 - P7; Q0; R7; R9; S0-S2; T0-T2; X3-X5; E2Q04-06; R8

Laboratory: Q4 Scientific Inc. Hrs for Review:

Following are our findings:

CC: Howard Pham
Region 5 TPO
Mail Code: SRT-4J

SAMPLE DELIVERY GROUP (SDG)
COVER SHEET

SDG Number:	E2PP4		
Laboratory Name:	A4 SCIENTIFIC, INC.	**Laboratory Code:**	A4
Contract No.:	EPW05036	**Case No.:**	37367
Analysis Price:	$416.00	**SDG Turnaround:**	21 days

Modified Analysis (if applicable):

Modification Reference No.: _____

EPA Sample Numbers in SDG (Listed in Numerical Order)

1) E2PP4	7) E2PR9	13) E2PT2	19) E2Q06
2) E2PP5	8) E2PS0	14) E2PX3	20) E3PR8
3) E2PP6	9) E2PS1	15) E2PX4	21)
4) E2PP7	10) E2PS2	16) E2PX5	22)
5) E2PQ0	11) E2PT0	17) E2Q04	23)
6) E2PR7	12) E2PT1	18) E2Q05	24)

E2PP4	E3PR8
First Sample in SDG	Last Sample in SDG
04/15/2008	04/15/2008
First Sample Receipt Date	Last Sample Receipt Date

*Note: There are a maximum of 20 **field** samples [excluding Performance Evaluation (PE) Samples] in an SDG. Attach the TR/COC Records to this form in alphanumeric order (the order listed above on this form).*

Jessica Schultz
Signature

4/17/08
Date

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 37367
DAS No:
SDG No: E2PP4

L

Date Shipped:	4/14/2008
Carrier Name:	FedEx
Airbill:	811417071877
Shipped to:	A4 Scientific, Inc. 1544 Sawdust Road Suite 505 The Woodlands TX 77380 (281) 292-5277

Chain of Custody Record

	Relinquished By	(Date / Time)	Received By	(Date / Time)
1	[signature]	4-14-08/9:15AM		
2				
3				
4			J. Schultz	4/15/08 10:00

Sampler Signature:

For Lab Use Only

Lab Contract No: EPW05036
Unit Price: 0
Transfer To:
Lab Contract No:
Unit Price: 25 4/15/08

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
E2PP4	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C99867 (HCL) (1)	GW13	S: 4/14/2008	11:10	1388 54F 0008922-01	Intact
E2PP5	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099878 (HCL) (1)	GW24	S: 4/14/2008	18:05	-02	
E2PP6	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099879 (HCL) (1)	GW25	S: 4/14/2008	18:20	-03	
E2PP7	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099892 (HCL), 5C099893 (HCL), 5C099894 (HCL) (3)	GW33	S: 4/14/2008	19:10	-04	
E2PQ0	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099887 (HCL) (1)	GW34	S: 4/14/2008	19:35	-05	
E2PR7	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099872 (HCL) (1)	GW18	S: 4/14/2008	16:30	-06	
E2PR8	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099873 (HCL) (1)	GW19	S: 4/14/2008	16:30	-07	
E2PR9	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099875 (HCL) (1)	GW21	S: 4/14/2008	16:58	-08	
E2PS0	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099874 (HCL) (1)	GW20	S: 4/14/2008	16:58	-09	
E2PS1	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099877 (HCL) (1)	GW23	S: 4/14/2008	17:35	-10	

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:	
	E2PP7	Ken M Smith	4°C	23648	23649
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? 4	Shipment Iced? 4

CLP TVOA = CLP TCL Trace Volatiles

TR Number: 5-551068049-010188-0003

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 37367
DAS No:
SDG No: E2PP4 **L**

Date Shipped:	4/14/2008
Carrier Name:	FedEx
Airbill:	811417071877
Shipped to:	A4 Scientific, Inc. 1544 Sawdust Road Suite 505 The Woodlands TX 77380 (281) 292-5277

Chain of Custody Record

	Relinquished By	(Date / Time)	Received By	(Date / Time)
1	[signature]	4-14-08/9:15PM	[signature]	
2				
3				
4			J. Dchultz	4/15/08 10:00

Sampler Signature:

For Lab Use Only

Lab Contract No:	EPW05036
Unit Price:	Ø
Transfer To:	2
Lab Contract No:	35 4/15/08
Unit Price:	

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
E2PS2	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099876 (HCL) (1)	GW22	S: 4/14/2008	17:22	0008922-11	Intact
E2PT0	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099870 (HCL) (1)	GW16	S: 4/14/2008	16:50	-12	
E2PT1	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099869 (HCL) (1)	GW15	S: 4/14/2008	17:20	-13	
E2PT2	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099868 (HCL) (1)	GW14	S: 4/14/2008	17:30	-14	
E2PX3	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099871 (HCL) (1)	GW17	S: 4/14/2008	17:35	-15	
E2PX4	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099882 (HCL) (1)	GW28	S: 4/14/2008	18:15	-16	
E2PX5	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099881 (HCL) (1)	GW27	S: 4/14/2008	18:45	-17	
E2Q04	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099880 (HCL) (1)	GW26	S: 4/14/2008	18:30	-18	
E2Q05	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099883 (HCL) (1)	GW29	S: 4/14/2008	18:45	-19	
E2Q06	Ground Water/ Mark Jaworski	L/G	CLP TVOA (21)	5C099884 (HCL) (1)	GW30	S: 4/14/2008	19:00	-20	sdg final sp.

Shipment for Case Complete? N	**Sample(s) to be used for laboratory QC:** E2PP7	**Additional Sampler Signature(s):** [signature]	**Cooler Temperature Upon Receipt:** 4°c	**Chain of Custody Seal Number:** 23648 23649
Analysis Key: CLP TVOA = CLP TCL Trace Volatiles	**Concentration:** L = Low, M = Low/Medium, H = High	**Type/Designate:** Composite = C, Grab = G		**Custody Seal Intact?** Y **Shipment Iced?** Y

TR Number: 5-551068049-010188-0003

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602

A4 SCIENTIFIC, INC.
1544 Sawdust Road, Suite505•The Woodlands, TX 77380•Phone (281) 292-5277

Contract #: EPW05036	Case #: 37367	SDG #: E2PP4

SDG NARRATIVE

SAMPLE RECEIPT & LOGIN

The following samples were received on the dates listed against them. The samples were logged in for analysis as listed.

EPA SAMPLE #	LAB SAMPLE #	DATE/TIME RECEIVED	AIRBILL NO.	ANALYSIS	Total # of Containers Received	MATRIX	REMARKS
E2PP4	0008922-01	4/15/08 10:00	811417071877	TVOA	3	WATER	
E2PP5	0008922-02	4/15/08 10:00	811417071877	TVOA	3	WATER	
E2PP6	0008922-03	4/15/08 10:00	811417071877	TVOA	3	WATER	
E2PP7	0008922-04	4/15/08 10:00	811417071877	TVOA	9	WATER	MS/MSD
E2PQ0	0008922-05	4/15/08 10:00	811417071877	TVOA	3	WATER	
E2PR7	0008922-06	4/15/08 10:00	811417071877	TVOA	3	WATER	
E2PR8	0008922-07	4/15/08 10:00	811417071877	TVOA	3	WATER	
E2PR9	0008922-08	4/15/08 10:00	811417071877	TVOA	3	WATER	
E2PS0	0008922-09	4/15/08 10:00	811417071877	TVOA	3	WATER	
E2PS1	0008922-10	4/15/08 10:00	811417071877	TVOA	3	WATER	
E2PS2	0008922-11	4/15/08 10:00	811417071877	TVOA	3	WATER	
E2PT0	0008922-12	4/15/08 10:00	811417071877	TVOA	3	WATER	
E2PT1	0008922-13	4/15/08 10:00	811417071877	TVOA	3	WATER	
E2PT2	0008922-14	4/15/08 10:00	811417071877	TVOA	3	WATER	
E2PX3	0008922-15	4/15/08 10:00	811417071877	TVOA	3	WATER	
E2PX4	0008922-16	4/15/08 10:00	811417071877	TVOA	3	WATER	
E2PX5	0008922-17	4/15/08 10:00	811417071877	TVOA	3	WATER	
E2Q04	0008922-18	4/15/08 10:00	811417071877	TVOA	3	WATER	
E2Q05	0008922-19	4/15/08 10:00	811417071877	TVOA	3	WATER	
E2Q06	0008922-20	4/15/08 10:00	811417071877	TVOA	3	WATER	

TVOA=CLP TCL Trace Volatiles

The cooler temperatures are listed against the coolers.

DATE RECEIVED	COOLER NO.	Temp (in °C)
4/15/08	1	4

No discrepancies or issues were noted during sample receipt and login.

VOLATILES TRACE

Samples were analyzed using instrument **C-5973 and F-5973**.

Instrument C-5973 consisted of an Agilent 5973 GC/MS with a 25-meter long DB-624 (Agilent cat#128-1324) column having a 0.2mm ID and 1.12µm film thickness. OI Purge and Trap Model 4560 with an Archon auto sampler. The trap used was a #10 trap (OI Cat# 228122) having an approximate composition of 40% Tenax, 30% Silica gel and 30% CMS.

Instrument F-5973 consisted of an Agilent 5973 GC/MS with a 25-meter long DB-624 (Agilent cat#128-1324) column having a 0.2mm ID and 1.12µm film thickness, OI Purge and Trap Model 4560 with an Archon auto sampler. The trap used was a #10 trap (OI Cat# 228122) having an approximate composition of 40% Tenax, 30% Silica gel and 30% CMS.

Contract #: EPW05036	Case #: 37367	SDG #: E2PP4

All VOA samples had the pH characteristics verified. The reading is listed below.

EPA SAMPLE #	LAB SAMPLE #	pH
E2PP4	0008922-01	≤ 2
E2PP5	0008922-02	≤ 2
E2PP6	0008922-03	≤ 2
E2PP7	0008922-04	≤ 2
E2PQ0	0008922-05	≤ 2
E2PR7	0008922-06	≤ 2
E2PR8	0008922-07	≤ 2
E2PR9	0008922-08	≤ 2
E2PS0	0008922-09	≤ 2
E2PS1	0008922-10	≤ 2
E2PS2	0008922-11	≤ 2
E2PT0	0008922-12	≤ 2
E2PT1	0008922-13	≤ 2
E2PT2	0008922-14	≤ 2
E2PX3	0008922-15	≤ 2
E2PX4	0008922-16	≤ 2
E2PX5	0008922-17	≤ 2
E2Q04	0008922-18	≤ 2
E2Q05	0008922-19	≤ 2
E2Q06	0008922-20	≤ 2

The following samples were run at dilution, listed against them to get all the compounds within range.

EPA SAMPLE ID	DILUTION
E2PP6	2
E2PR8	2
E2PT1	2

Analyst had overlooked and not performed the dilution for sample E2PR7.

Manual integrations were performed for the following samples for the compounds listed against them.

VSTD00560-Chloroethane-d5
VSTD00560-Chloroethane
VSTD01060-Chloroethane-d5
VSTD01060-Chloroethane
VSTD00160-Chloroethane
VSTD0.560-1,2-Dibromo-3-Chloropropane

These manual integrations were necessary because the software failed to accurately integrate the entire peak. In all the above instances, the quantitation reports are flagged with "m". A hard copy printout of the manual integration, the scan ranges, and initials of the analyst or manager is included in the data package.

The following equations were used for calculation of the sample results from raw instrument output data:

VOLATILES

Water (Low/Med, Trace & SIM):

2A - FORM II VOA-1
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: _____ SDG No.: E2PP4

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC1 (VCL) #	VDMC2 (CLA) #	VDMC3 (DCE) #	VDMC4 (BUT) #	VDMC5 (CLF) #	VDMC6 (DCA) #	VDMC7 (BEN) #
01	E2PP4	71	88	67	67	86	83	92
02	E2PP5	75	96	70	92	86	95	88
03	E2PP6	69	93	67	88	83	87	89
04	E2PP6DL	80	94	66	88	84	89	90
05	E2PP7	75	94	68	90	85	91	86
06	E2PP7MS	67	23 *	91	87	84	93	92
07	*E2PP7MSD*	*80*	99	97	93	90	96	92
08	E2PQ0	81	102	72	101	92	99	96
09	E2PR7	74	93	72	96	93	96	99
10	E2PR8	73	90	67	100	85	93	88
11	E2PR8DL	78	92	65	97	84	93	87
12	E2PR9	76	93	69	110	92	100	87
13	E2PS0	70	91	63	88	87	85	90
14	E2PS1	79	93	68	91	85	93	89
15	E2PS2	79	95	67	80	85	88	85
16	E2PT0	79	94	68	93	87	95	86
17	E2PT1	76	91	68	93	87	89	88
18	E2PT1DL	77	93	*64*	*105*	87	*99*	87
19	E2PT2	75	91	67	103	88	99	87
20	E2PX3	77	94	69	82	83	86	88
21	E2PX4	78	89	67	89	83	91	88
22	E2PX5	78	95	67	88	86	92	91
23	E2Q04	77	90	65	86	82	90	86
24	E2Q05	75	93	66	91	87	97	89
25	E2Q06	76	91	66	97	82	89	86
26	VBLK74	74	90	65	95	82	89	85
27	VBLK76	75	91	66	105	86	89	87
28	VBLK79	82	96	67	100	85	89	83
29	VBLK84	80	91	71	91	90	92	94
30	VHBLK01	78	97	70	92	94	95	90

		QC LIMITS
VDMC1	(VCL) = Vinyl chloride-d3	(65-131)
VDMC2	(CLA) = Chloroethane-d5	(71-131)
VDMC3	(DCE) = 1,1-Dichloroethene-d2	(55-104)
VDMC4	(BUT) = 2-Butanone-d5	(49-155)
VDMC5	(CLF) = Chloroform-d	(78-121)
VDMC6	(DCA) = 1,2-Dichloroethane-d4	(78-129)
VDMC7	(BEN) = Benzene-d6	(77-124)

\# Column to be used to flag recovery values
* Value outside of contract required QC limits

2A - FORM II VOA-1
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: _____ SDG No.: E2PP4

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC1 (VCL) #	VDMC2 (CLA) #	VDMC3 (DCE) #	VDMC4 (BUT) #	VDMC5 (CLF) #	VDMC6 (DCA) #	VDMC7 (BEN) #
01	VIBLK63	86	103	74	99	97	98	97
02								
03								
04								
05								
06								
07								
08								
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

		QC LIMITS
VDMC1	(VCL) = Vinyl chloride-d3	(65-131)
VDMC2	(CLA) = Chloroethane-d5	(71-131)
VDMC3	(DCE) = 1,1-Dichloroethene-d2	(55-104)
VDMC4	(BUT) = 2-Butanone-d5	(49-155)
VDMC5	(CLF) = Chloroform-d	(78-121)
VDMC6	(DCA) = 1,2-Dichloroethane-d4	(78-129)
VDMC7	(BEN) = Benzene-d6	(77-124)

\# Column to be used to flag recovery values
* Value outside of contract required QC limits

2B - FORM II VOA-2
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: _____ SDG No.: E2PP4

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC8 (DPA) #	VDMC9 (TOL) #	VDMC10 (TDP) #	VDMC11 (HEX) #	VDMC12 (DXE) #	VDMC13 (TCA) #	VDMC14 (DCZ) #	TOT OUT
01	E2PP4	95	88	78	59		72 *	89	1
02	E2PP5	93	85	86	80		92	93	0
03	E2PP6	94	87	80	70		93	95	0
04	E2PP6DL	93	86	89	82		92	93	0
05	E2PP7	94	83	87	78		89	96	0
06	E2PP7MS	97	90	90	83		91	94	1
07	E2PP7MSD	98	89	90	88		101	93	0
08	E2PQ0	101	92	92	68		101	106	0
09	E2PR7	102	95	94	91		92	102	0
10	E2PR8	92	85	87	87		99	95	0
11	E2PR8DL	94	84	87	91		93	95	0
12	E2PR9	97	84	88	92		102	95	0
13	E2PS0	96	89	82	74		91	99	0
14	E2PS1	95	86	89	79		94	92	0
15	E2PS2	90	86	78	73		82	94	0
16	E2PT0	94	84	85	78		93	94	0
17	E2PT1	95	88	85	79		96	99	0
18	E2PT1DL	99	86	95	106		106	93	0
19	E2PT2	93	86	87	88		102	98	0
20	E2PX3	92	85	81	69		87	89	0
21	E2PX4	93	85	80	74		90	89	0
22	E2PX5	93	87	86	79		93	94	0
23	E2Q04	88	85	82	82		95	96	0
24	E2Q05	100	87	85	81		96	97	0
25	E2Q06	90	85	87	85		95	92	0
26	VBLK74	91	82	85	84		86	91	0
27	VBLK76	93	86	87	89		92	98	0
28	VBLK79	87	83	84	96		88	92	0
29	VBLK84	99	94	89	90		92	102	0
30	VHBLK01	96	90	89	83		97	93	0

	QC LIMITS
VDMC8 (DPA) = 1,2-Dichloropropane-d6	(79-124)
VDMC9 (TOL) = Toluene-d8	(77-121)
VDMC10 (TDP) = trans-1,3-Dichloropropene-d4	(73-121)
VDMC11 (HEX) = 2-Hexanone-d5	(28-135)
VDMC12 (DXE) = 1,4-Dioxane-d8	(50-150)
VDMC13 (TCA) = 1,1,2,2-Tetrachloroethane-d2	(73-125)
VDMC14 (DCZ) = 1,2-Dichlorobenzene-d4	(80-131)

Column to be used to flag recovery values
* Values outside of contract required QC limits
Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

2B - FORM II VOA-2
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: _____ SDG No.: E2PP4

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC8 (DPA) #	VDMC9 (TOL) #	VDMC10 (TDP) #	VDMC11 (HEX) #	VDMC12 (DXE) #	VDMC13 (TCA) #	VDMC14 (DCZ) #	TOT OUT
31	VIBLK63	101	95	92	80		100	99	0
32									
33									
34									
35									
36									
37									
38									
39									
40									
41									
42									
43									
44									
45									
46									
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57									
58									
59									
60									

	QC LIMITS
VDMC8 (DPA) = 1,2-Dichloropropane-d6	(79-124)
VDMC9 (TOL) = Toluene-d8	(77-121)
VDMC10 (TDP) = trans-1,3-Dichloropropene-d4	(73-121)
VDMC11 (HEX) = 2-Hexanone-d5	(28-135)
VDMC12 (DXE) = 1,4-Dioxane-d8	(50-150)
VDMC13 (TCA) = 1,1,2,2-Tetrachloroethane-d2	(73-125)
VDMC14 (DCZ) = 1,2-Dichlorobenzene-d4	(80-131)

Column to be used to flag recovery values
* Values outside of contract required QC limits
Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

3A - FORM III VOA-1
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: _____ SDG No.: E2PP4

Matrix Spike - EPA Sample No.: E2PP7 Level: (TRACE or LOW) TRACE

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS %REC #	QC LIMITS REC.
1,1-Dichloroethene	5.0	0.0	6.2	124	61-145
Benzene	5.0	0.0	6.5	130 *	76-127
Trichloroethene	5.0	0.0	6.1	121 *	71-120
Toluene	5.0	0.0	6.2	124	76-125
Chlorobenzene	5.0	0.0	5.7	114	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %REC #	%RPD #	QC LIMITS	
					RPD	REC.
1,1-Dichloroethene	5.0	6.6	133	7	0-14	61-145
Benzene	5.0	6.5	129 *	1	0-11	76-127
Trichloroethene	5.0	0.0	0 *	999.9*	0-14	71-120
Toluene	5.0	6.2	125	1	0-13	76-125
Chlorobenzene	5.0	6.1	121	6	0-13	75-130

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 4 out of 10 outside limits

COMMENTS: _____

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
VBLK74

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: _____ SDG No.: E2PP4

Lab File ID: C3762.D Lab Sample ID: 8040060-BLK1

Instrument ID: C-5973

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 04/21/2008

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 0817

GC Column: DB-624 ID: 0.20 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E2PP4	0008922-01	C3764.D	0911
02	E2PX3	0008922-15	C3765.D	0938
03	E2PX4	0008922-16	C3766.D	1006
04	E2PP5	0008922-02	C3767.D	1033
05	E2Q06	0008922-20	C3768.D	1101
06	E2PP6	0008922-03	C3769.D	1133
07	E2Q04	0008922-18	C3770.D	1200
08	E2PP7	0008922-04	C3771.D	1227
09	E2PX5	0008922-17	C3772.D	1254
10	E2PQ0	0008922-05	C3773.D	1356
11	E2PR8	0008922-07	C3775.D	1450
12	E2PR9	0008922-08	C3776.D	1517
13	E2PS1	0008922-10	C3778.D	1617
14	E2PS0	0008922-09	C3795.D	0020
15				
16				
17				
18				
19				
20				
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22				
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25				
26				
27				
28				
29				
30				

COMMENTS: _____

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
VBLK76

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: _____ SDG No.: E2PP4

Lab File ID: C3780.D Lab Sample ID: 8040062-BLK1

Instrument ID: C-5973

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 04/21/2008

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 1713

GC Column: DB-624 ID: 0.20 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E2PS2	0008922-11	C3781.D	1745
02	E2PT0	0008922-12	C3782.D	1814
03	E2PT1	0008922-13	C3783.D	1842
04	E2PT2	0008922-14	C3784.D	1911
05	E2Q05	0008922-19	C3785.D	1940
06				
07				
08				
09				
10				
11				
12				
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20				
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22				
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30				

COMMENTS: _____

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
VBLK79

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: _____ SDG No.: E2PP4

Lab File ID: C3807.D Lab Sample ID: 8040070-BLK1

Instrument ID: C-5973

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 04/23/2008

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 0951

GC Column: DB-624 ID: 0.20 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E2PP6DL	0008922-03RE1	C3810.D	1111
02	E2PR8DL	0008922-07RE1	C3811.D	1138
03	E2PT1DL	0008922-13RE1	C3812.D	1205
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COMMENTS: _____

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
VBLK84

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref No.: _____ SDG No.: E2PP4

Lab File ID: C3862.D Lab Sample ID: 8040078-BLK1

Instrument ID: C-5973

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 04/25/2008

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 1001

GC Column: DB-624 ID: 0.20 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E2PR7	0008922-06	C3863.D	1032
02	VIBLK63	8040078-CCB1	C3864.D	1101
03	E2PP7MS	8040078-MS1	C3865.D	1135
04	E2PP7MSD	8040078-MSD1	C3866.D	1205
05	VHBLK01	0008922-21	C3871.D	1437
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COMMENTS: _____

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref _____ SDG No.: E2PP4

GC Column: DB-624 ID: 0.20 (mm) Init. Calib. Date(s): 04/16/2008 04/16/2008

EPA Sample No.(VSTD#####): VSTD00560 Date Analyzed: 04/16/2008

Lab File ID (Standard): C3563.D Time Analyzed: 1013

Instrument ID: C-5973 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	46378		10.44		61276		6.40		19528		13.26	
	UPPER LIMIT	92756		10.94		122552		6.90		39056		13.76	
	LOWER LIMIT	23189		9.94		30638		5.90		9764		12.76	
	EPA SAMPLE NO.												
01	VSTD02060	45165		10.44		58776		6.40		21825		13.26	
02	VSTD01060	47379		10.44		62102		6.40		21442		13.26	
03	VSTD00160	45191		10.44		59464		6.40		17020		13.26	
04	VSTD0.560	38595		10.44		49690		6.41		14449		13.26	
05	VSTD00561	39534		10.44		49422		6.41		18275		13.26	
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IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref _____ SDG No.: E2PP4

GC Column: DB-624 ID: 0.20 (mm) Init. Calib. Date(s): 04/16/2008 04/16/2008

EPA Sample No.(VSTD#####): VSTD00575 Date Analyzed: 04/21/2008

Lab File ID (Standard): C3761.D Time Analyzed: 0750

Instrument ID: C-5973 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	44105		10.44		59040		6.40		17834		13.26	
	UPPER LIMIT	88210		10.94		118080		6.90		35668		13.76	
	LOWER LIMIT	22053		9.94		29520		5.90		8917		12.76	
	EPA SAMPLE NO.												
01	VBLK74	38602		10.44		51923		6.41		13387		13.26	
02	E2PP4	38820		10.44		56070		6.41		11934		13.26	
03	E2PX3	34794		10.43		46511		6.40		12264		13.26	
04	E2PX4	34909		10.44		47749		6.40		12879		13.26	
05	E2PP5	36040		10.44		46795		6.40		13187		13.26	
06	E2Q06	37499		10.44		50237		6.41		14213		13.26	
07	E2PP6	35497		10.44		48072		6.41		12519		13.26	
08	E2Q04	38388		10.44		51043		6.40		14761		13.26	
09	E2PP7	37205		10.44		48348		6.41		13352		13.26	
10	E2PX5	35464		10.44		47535		6.40		13102		13.26	
11	E2PQ0	36153		10.43		47522		6.40		11739		13.26	
12	E2PR8	38289		10.44		50813		6.41		13879		13.26	
13	E2PR9	38308		10.44		47972		6.40		13942		13.26	
14	E2PS1	35055		10.44		47063		6.41		12479		13.26	
15	VSTD00576	37215		10.44		49875		6.40		15884		13.26	
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IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref _____ SDG No.: E2PP4

GC Column: DB-624 ID: 0.20 (mm) Init. Calib. Date(s): 04/16/2008 04/16/2008

EPA Sample No.(VSTD#####): VSTD00576 Date Analyzed: 04/21/2008

Lab File ID (Standard): C3779.D Time Analyzed: 1645

Instrument ID: C-5973 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	37215		10.44		49875		6.40		15884		13.26	
	UPPER LIMIT	74430		10.94		99750		6.90		31768		13.76	
	LOWER LIMIT	18608		9.94		24938		5.90		7942		12.76	
	EPA SAMPLE NO.												
01	VBLK76	37912		10.44		50127		6.41		12993		13.26	
02	E2PS2	37459		10.44		48813		6.41		12099		13.26	
03	E2PT0	34536		10.44		44625		6.41		12413		13.26	
04	E2PT1	34356		10.43		45453		6.41		12671		13.26	
05	E2PT2	35868		10.43		46373		6.40		13181		13.26	
06	E2Q05	33388		10.44		44739		6.41		12709		13.26	
07	E2PS0	35085		10.44		47449		6.41		11123		13.26	
08	VSTD00577	33069		10.44		46371		6.40		12622		13.26	
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IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref SDG No.: E2PP4

GC Column: DB-624 ID: 0.20 (mm) Init. Calib. Date(s): 04/16/2008 04/16/2008

EPA Sample No.(VSTD#####): VSTD00579 Date Analyzed: 04/23/2008

Lab File ID (Standard): C3806.D Time Analyzed: 0924

Instrument ID: C-5973 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	42218		10.43		56677		6.41		18402		13.26	
	UPPER LIMIT	84436		10.93		113354		6.91		36804		13.76	
	LOWER LIMIT	21109		9.93		28339		5.91		9201		12.76	
	EPA SAMPLE NO.												
01	VBLK79	41174		10.44		51930		6.40		14052		13.26	
02	E2PP6DL	33772		10.44		45322		6.40		11474		13.26	
03	E2PR8DL	36765		10.44		48266		6.40		12747		13.26	
04	E2PT1DL	35791		10.44		46440		6.41		13517		13.26	
05	VSTD00580	38865		10.43		51006		6.40		17025		13.26	
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IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 37367 Mod. Ref _____ SDG No.: E2PP4

GC Column: DB-624 ID: 0.20 (mm) Init. Calib. Date(s): 04/16/2008 04/16/2008

EPA Sample No.(VSTD#####): VSTD00584 Date Analyzed: 04/25/2008

Lab File ID (Standard): C3861.D Time Analyzed: 0925

Instrument ID: C-5973 Heated Purge: (Y/N) N

	IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD		33338		10.43		46198		6.40		11917		13.26	
	UPPER LIMIT		66676		10.93		92396		6.90		23834		13.76	
	LOWER LIMIT		16669		9.93		23099		5.90		5959		12.76	
	EPA SAMPLE NO.													
01	VBLK84		30974		10.44		41932		6.41		9783		13.26	
02	E2PR7		32014		10.44		44352		6.40		9906		13.26	
03	VIBLK63		26400		10.44		35094		6.41		8820		13.26	
04	E2PP7MS		34479		10.44		48571		6.40		11100		13.26	
05	E2PP7MSD		26729		10.44		35263		6.40		9775		13.26	
06	VHBLK01		28235		10.44		36621		6.41		9923		13.26	
07	VSTD00585		26173		10.43		34855		6.40		10982		13.26	
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IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

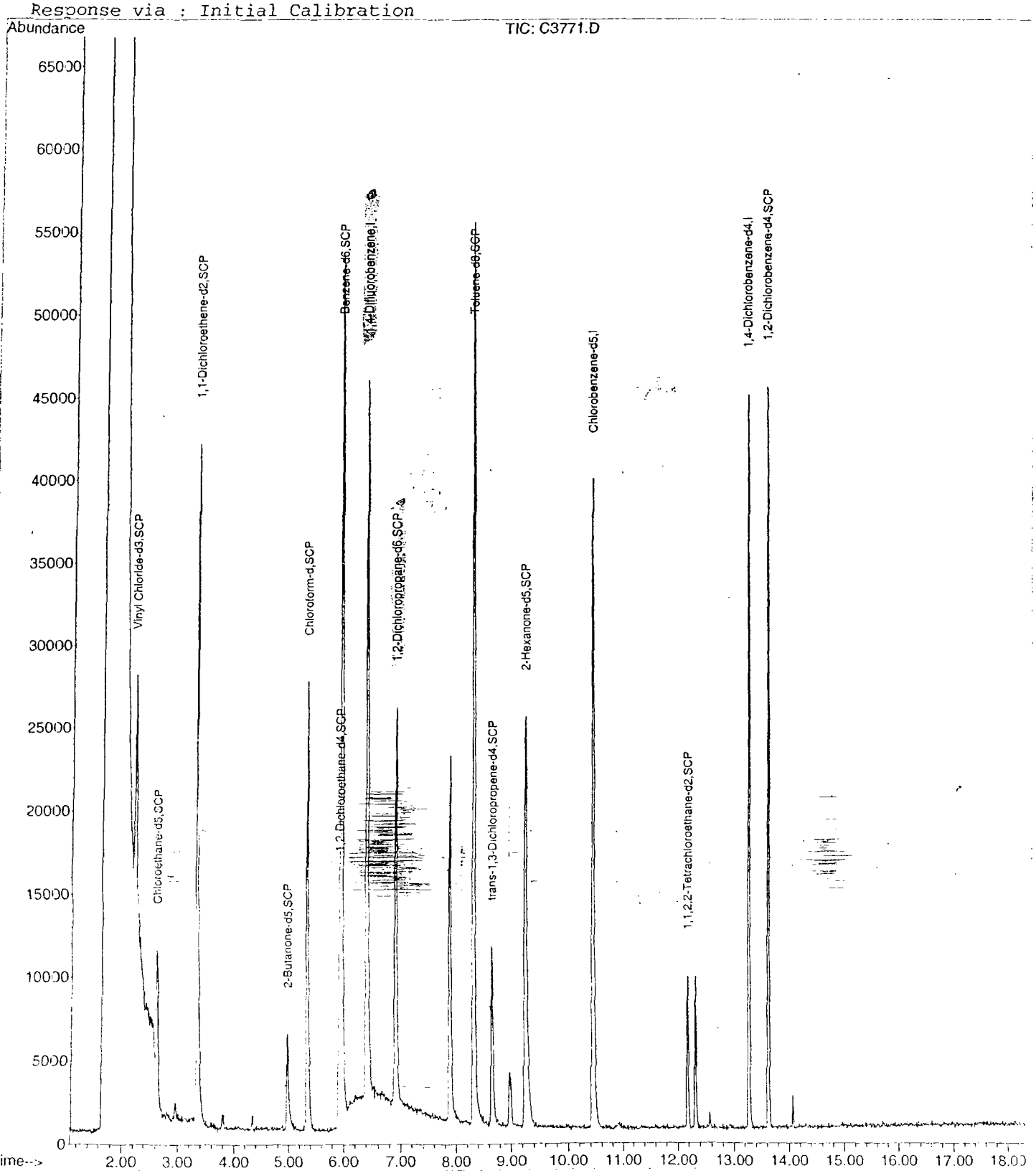
RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

Data File : C:\MSDCHEM\1\DATA\C3771.D Vial: 12
Acq On : 04/21/2008 1227 Operator: DP
Sample : 0008922-04 Inst : C-5973
Misc : E2PP7 25ML Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 22 12:08 2008 Quant Results File: SOTC3761.RES

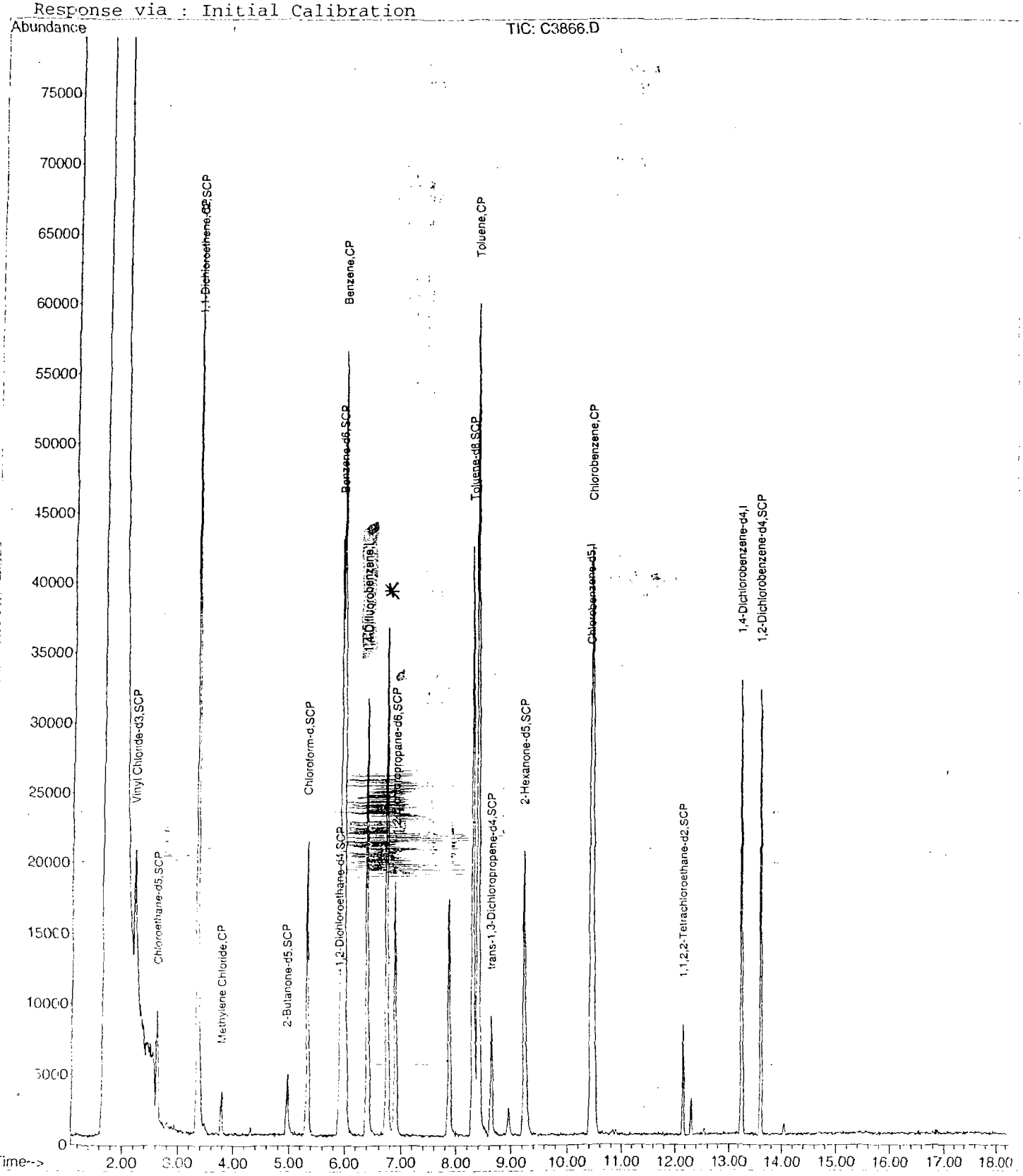
Method : C:\MSDCHEM\1\METHODS\SOTC3761.M (RTE Integrator)
Title : CLP SOM1.0-TRACE VOA-WATER -25ML
Last Update : Mon Apr 21 10:22:31 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\C3866.D Vial: 7
Acq On : 04/25/2008 1205 Operator: DP
Sample : 8040078-MSD1 Inst : C-5973
Misc : E2PP7MSD 25ML Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 14:21 2008 Quant Results File: SOTC3861.RES

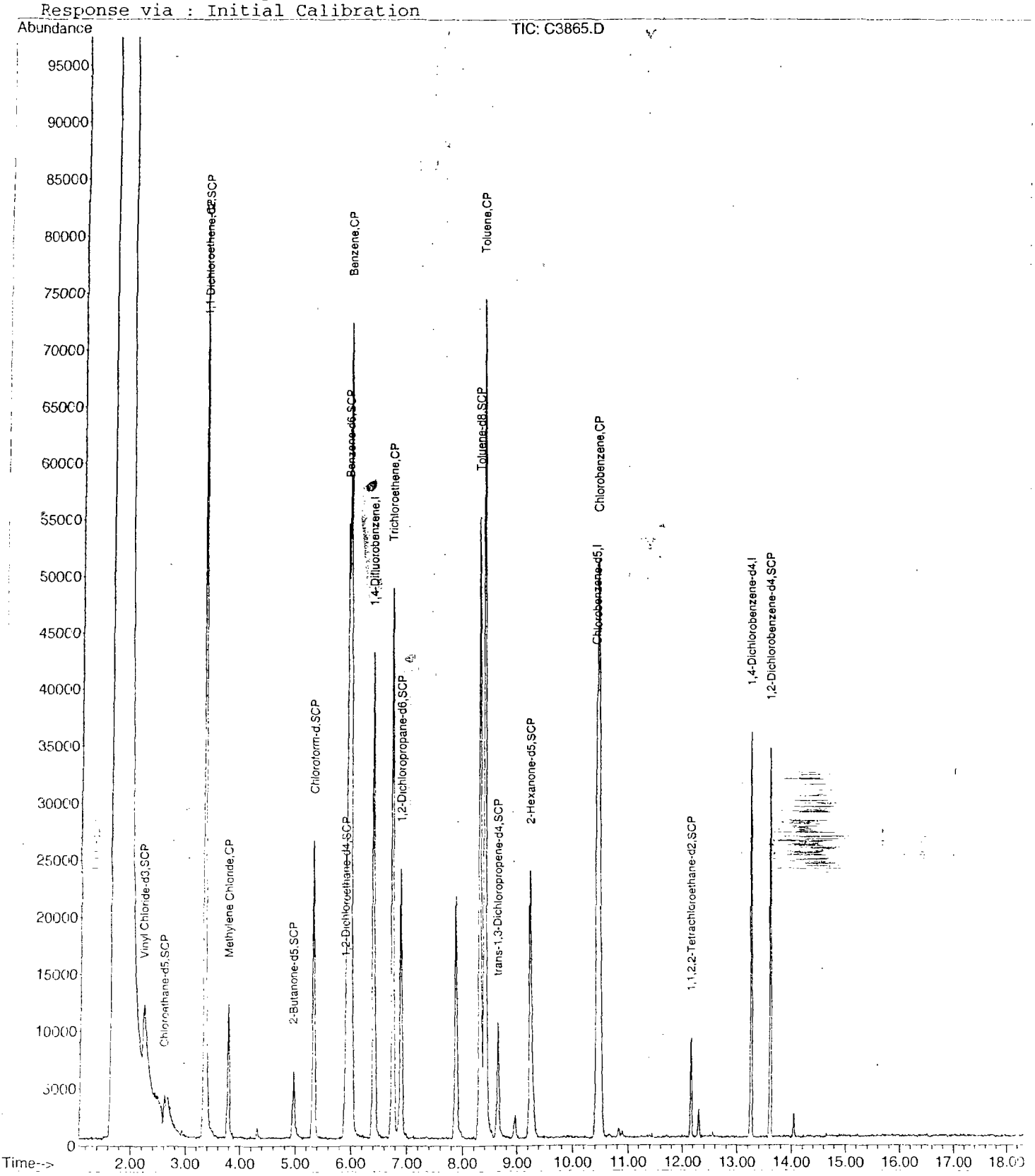
Method : C:\MSDCHEM\1\METHODS\SOTC3861.M (RTE Integrator)
Title : CLP SOM1.0-TRACE VOA-WATER -25ML
Last Update : Thu Apr 24 09:42:06 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\C3865.D Vial: 6
Acq On : 04/25/2008 1135 Operator: DP
Sample : 8040078-MS1 Inst : C-5973
Misc : E2PP7MS 25ML Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 11:56 2008 Quant Results File: SOTC3861.RES

Method : C:\MSDCHEM\1\METHODS\SOTC3861.M (RTE Integrator)
Title : CLP SOM1.0-TRACE VOA-WATER -25ML
Last Update : Thu Apr 24 09:42:06 2008
Response via : Initial Calibration



C3865.D SOTC3361.M Fri May 02 14:16:27 2008

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V
ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Sample Delivery Group: E2PP4 CERCLIS No: IND000510229

Case No: 37367 Site Name/Location: Lane Street GW Contamination (IN)

Contractor or EPA Lab: Aft Scientific Data User: IDEM

No. of Samples: 20 Date Sampled or Date Received: 6 May 08

Have Chain-of-Custody records been received? Yes ✓ No ____
Have traffic reports or packing lists been received? Yes ✓ No ____
If no, are traffic report or packing list numbers written on the Chain-of-Custody Record?
Yes ____ No ____
If no, which traffic report or packing list numbers are missing?

____ ____ ____ ____
____ ____ ____ ____

Are basic data forms in? Yes ✓ No ____
No of samples claimed: 20 No. of samples received: ____

Received by: pdais Date: 6 May 08

Received by LSSS: pdais Date: 7 May 08

Review started: 5-13-08 Reviewer Signature: Stephen TBR

Total time spent on review: 16 hrs Date review completed: 5-16-08

Copied by: A. C. Harvey Date: May 22, 2008

Mailed to user by: pdais Date: 23 May 08

DATA USER:
Please fill in the blanks below and return this form to:
Sylvia Griffin, Data Mgmt. Coordinator, Region V, ML-10C

Data received by: ____ Date: ____

Data review received by: ____ Date: ____

Inorganic Data Complete	[ ] Suitable for Intended Purpose [ ] ✓ if OK
Organic Data Complete	[ ] Suitable for Intended Purpose [ ] ✓ if OK
Dioxin data Complete	[ ] Suitable for Intended Purpose [ ] ✓ if OK
SAS Data Complete	[ ] Suitable for Intended Purpose [ ] ✓ if OK

PROBLEMS: Please indicate reasons why data are not suitable for your uses.

Received by Data Mgmt. Coordinator for Files. Date: ____